



**Proposed FY 2026 – FY 2027
Biennial Budget &
Five Year Financial Plan
FY 2026 through FY 2030**

**Presented to the Audit Committee
January 6, 2025**



Table of Contents

Executive Summary	1
1A - Water System Biennial Revenue Requirement.....	3
1B - Water System Five Year Plan.....	4
1C - Sewer System Revenue Requirement	5
1D - Sewer System Five Year Plan.....	6
1E – Combined Water & Sewer Biennial Budget	7
1F – Combined Water & Sewer Five Year Plan.....	8
2A – Combined O&M Biennial Budget.....	9
Capital Program Activities	11
5A – Water Improvement and Extension Fund.....	12
5B – Sewer Improvement and Extension Fund.....	13
5C – Water Construction Fund	14
5D – Sewer Construction Fund.....	15
Appendices	
Appendix 1 – Analysis of Personnel Costs.....	16
Appendix 2 – FY 2026 - FY 2035 Ten Year Financial Plan Update as of January 2, 2025.....	27
Appendix 3 - Budget & Charges Briefing - GLWA Board of Directors, October 9, 2024	46
Appendix 4 - Utility Cost Review - September 2024 – Presented to GLWA Board of Directors, October 9, 2024.....	93
Appendix 5 - Capital Improvement Plan FY 2026 - 2030 Discussion Draft 2 – Presented at GLWA Board Capital Planning Committee Meeting December 10, 2024	147

Executive Summary

January 3, 2025

This initial presentation of the Proposed FY 2026 – FY 2027 Biennial Budget & Five Year Financial Plan for FY 2026 through FY 2030 appears in a different format than prior years. This is because the Great Lakes Water Authority (GLWA) is in a transition era from one budget system (BS&A) to the new Workday and Adaptive environment. Development of the more familiar budget template document has been developed in Adaptive. The next steps are testing and launch of that template which is expected to occur over the next 60 days. In the interim, the GLWA team has worked with information from the prior and new systems with in-depth Excel analysis to bridge the gap.

Despite the transition to new technology, the budget message, and the underlying economic realities that we have previously presented have not changed. GLWA's commitment to the biennial budget, five year plan, and ten year plan process result in very little surprises. To the extent that GLWA must adapt to changing external forces, the in-depth financial planning allows for adaptability. The good news is that there is solid planning, budgeting, and financial management practices in place; the unfortunate news is that, as previously presented for the past few years, the upcoming FY 2026 results in proposed budget and charge proposals that exceed to long-standing 4% threshold.

Why now?

The budget pressures are not new. Fortunately, there were three key factors that allowed GLWA to *defer* passing along multiple years of double digit increases in commodities (such as chemicals and utilities) and construction costs.

1. At the onset of the COVID era, GLWA's large spend for chemicals and construction costs were under multiple year contracts. With fixed pricing in place, the impact of increases in costs was not realized until after those contracts expired. New contracts reflect current pricing.
2. The investment rate of return for GLWA's fixed income portfolio has experienced materially favorable performance for the past two years. That is about to change. Revenues from investment earnings, reduce the need to increase charges. However, investment rates of return are cyclical. A lower rate of return is expected beginning in FY 2025 which increases pressure on charges.
3. Some maintenance and capital projects were deferred. While the public does not physically see aging water utility infrastructure as one would with roads and bridges, the need to consistently and continuously repair, upgrade and/or replace the infrastructure exists. New technology and programs such as the Linear System Integrity Program allow for targeted, smart investment in infrastructure, yet it also identifies where further work is needed along with an indicator of urgency.

Later in this document, we provide GLWA's ten year plan. Success in that plan is measured by achieving desirable credit metrics that support a lower cost of borrowing. Bond refunding savings have an impact on keeping charges affordable and fending off budget pressures. This past year provides a clear example. In FY 2024, active management of GLWA's debt portfolio resulted in nearly \$176 million in future annual cash flow sales from bond refinancing transactions in November 2023 and May 2024. As we were receiving good news on our debt savings, the need for GLWA to update its corrosion control strategy to provide added protection for our member partners' local systems was emerging. While there is no lead in GLWA's water and no lead pipes in GLWA's transmission system, increasing the orthophosphate dosage was deemed the best course of action for our region. What goes through the water system has a companion impact on the sewer system. The increased chemical costs for the water and sewer system largely approximates the annual savings from the refunded bonds.

GLWA has cross functional teams that focus on better understanding our costs so that we can control them. In October 2024, the Utility Cost Review Team, presented their findings to the Board of Directors. The focus was to non-discretionary purchases, such as chemicals and utilities used in the water and wastewater treatment process. Collectively, the total costs of these commodities in FY 2025 are anticipated to be approximately 55% higher than costs experienced in FY 2020. This cross functional team made progress, including natural gas costs containment, and continues to explore further opportunities and education.

That team's efforts align with similar efforts by GLWA's engineering teams who have been on the forefront of seeing escalated project bid costs. Their negotiation skills and willingness to revisit a project approach, or in some cases rebid, demonstrates a commitment to making sure that GLWA extracts the highest value for the resources that our Member Partners have entrusted us to manage.

This presentation is the first of many as we progress through the next phases of public discussion related to budget and changes for the fiscal period beginning July 1, 2025.

We thrive on feedback and questions. Any inquiries may be directed to cfo@glwater.org

1A - Water System Biennial Revenue Requirement

	FY 2024	FY 2025	FY 2026			FY 2027		
	Actual	Adopted Budget	Proposed Budget	Dollar Variance	Percent Variance	Proposed Budget	Dollar Variance	Percent Variance
Water System Revenue Requirements								
Revenues								
Revenues from Charges								
Suburban Wholesale Customers	\$326,367,836	\$ 347,758,000	\$371,898,700	\$ 24,140,700	6.9%	\$398,806,200	\$ 26,907,500	7.2%
Local System Charges	25,537,200	27,094,800	30,622,600	3,527,800	13.0%	34,554,700	3,932,100	12.8%
Total Revenue from Charges	351,905,036	374,852,800	402,521,300	27,668,500	7.4%	433,360,900	30,839,600	7.7%
Other Operating Revenue	901,919	400,000	300,000	(100,000)	-25.0%	300,000	-	0.0%
Investment Earnings								
Unrestricted	13,343,940	6,692,200	7,884,400	1,192,200	17.8%	7,872,900	(11,500)	-0.1%
Restricted for Debt Service	4,992,455	3,182,100	3,302,100	120,000	3.8%	3,523,600	221,500	6.7%
Total Investment Earnings	18,336,395	9,874,300	11,186,500	1,312,200	13.3%	11,396,500	210,000	1.9%
Total Revenues	\$371,143,350	\$ 385,127,100	\$414,007,800	\$ 28,880,700	7.5%	\$445,057,400	\$ 31,049,600	7.5%
Revenue Requirements								
Operations & Maintenance Expense	\$161,037,183	\$ 169,625,000	\$182,456,000	\$ 12,831,000	7.6%	\$193,475,700	\$ 11,019,700	6.0%
Debt Service	160,622,417	175,300,800	185,983,000	10,682,200	6.1%	203,033,000	17,050,000	9.2%
General Retirement System Pension	1,505,500	2,283,300	1,622,200	(661,100)	-29.0%	1,450,400	(171,800)	-10.6%
Water Residential Assistance Program Contribution	1,851,600	1,947,800	2,004,100	56,300	2.9%	2,157,500	153,400	7.7%
Extraordinary Repair & Replacement Deposit	2,836,000	-	1,244,500	1,244,500	100.0%	892,200	(352,300)	-28.3%
Regional System Lease	22,500,000	22,500,000	22,500,000	-	0.0%	22,500,000	-	0.0%
Receiving Fund Working Capital Requirement	-	6,200,000	1,600,000	(4,600,000)	-74.2%	1,100,000	(500,000)	-31.3%
Improvement & Extension Fund Transfer Pending	15,767,900	7,270,200	16,598,000	9,327,800	128.3%	20,448,600	3,850,600	23.2%
Annual Water System Revenue Requirements	\$366,120,600	\$ 385,127,100	\$414,007,800	\$ 28,880,700	7.5%	\$445,057,400	\$ 31,049,600	7.5%

The revenue requirement schedule is the basis for charges.

In last year's FY 2026 Biennial Budget that was adopted by the Board of Directors, the expected adjustment was **7.2%** for suburban wholesale and **13.4%** for the local system.

Through careful planning, the **preliminary** increase is lower for suburban wholesale at **6.9%** and **13.0%** for the local system.

The differential in the percentages between suburban and local is due to a higher *effective* rate for the local system after a \$20.7M annual credit.

Final charges calculations will provide the actual proposed charge for each Member Partner.

1B - Water System Five Year Plan

	Actual	Adopted Budget	Proposed Budget		Projected		
Water System Revenue Requirements	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Revenues							
Revenues from Charges							
Suburban Wholesale Customers	\$ 326,367,836	\$ 347,758,000	\$ 371,898,700	\$ 398,806,200	\$ 426,954,800	\$ 456,619,300	\$ 486,327,500
Local System Charges	25,537,200	27,094,800	30,622,600	34,554,700	38,668,200	43,003,200	47,344,600
Total Revenue from Charges	351,905,036	374,852,800	402,521,300	433,360,900	465,623,000	499,622,500	533,672,100
Other Operating Revenue	901,919	400,000	300,000	300,000	300,000	300,000	300,000
Investment Earnings							
Unrestricted	13,343,940	6,692,200	7,884,400	7,872,900	8,430,200	9,643,800	7,678,400
Restricted for Debt Service	4,992,455	3,182,100	3,302,100	3,523,600	4,081,100	4,743,300	3,530,200
Total Investment Earnings	18,336,395	9,874,300	11,186,500	11,396,500	12,511,300	14,387,100	11,208,600
Total Revenues	\$ 371,143,350	\$ 385,127,100	\$ 414,007,800	\$ 445,057,400	\$ 478,434,300	\$ 514,309,600	\$ 545,180,700
Revenue Requirements							
Operations & Maintenance Expense	\$ 161,037,183	\$ 169,625,000	\$ 182,456,000	\$ 193,475,700	\$ 198,159,400	\$ 199,052,300	\$ 203,480,900
Debt Service	160,622,417	175,300,800	185,983,000	203,033,000	213,374,400	226,385,500	237,042,700
General Retirement System Pension	1,505,500	2,283,300	1,622,200	1,450,400	1,306,700	1,275,600	1,824,100
Water Residential Assistance Program Contribution	1,851,600	1,947,800	2,004,100	2,157,500	2,318,000	2,487,200	2,656,600
Extraordinary Repair & Replacement Deposit	2,836,000	-	1,244,500	892,200	-	-	-
Regional System Lease	22,500,000	22,500,000	22,500,000	22,500,000	22,500,000	22,500,000	22,500,000
Receiving Fund Working Capital Requirement	-	6,200,000	1,600,000	1,100,000	1,400,000	5,100,000	4,400,000
Improvement & Extension Fund Transfer Pending	15,767,900	7,270,200	16,598,000	20,448,600	39,375,800	57,509,000	73,276,400
Annual Water System Revenue Requirements	\$ 366,120,600	\$ 385,127,100	\$ 414,007,800	\$ 445,057,400	\$ 478,434,300	\$ 514,309,600	\$ 545,180,700
<i>Change in Annual Revenue Requirement</i>			7.5%	7.5%	7.5%	7.5%	6.0%

1C - Sewer System Revenue Requirement

Sewer System Revenue Requirements	FY 2024	FY 2025	FY 2026			FY 2027		
	Actual	Adopted Budget	Proposed Budget	Dollar Variance	Percent Variance	Proposed Budget	Dollar Variance	Percent Variance
Revenues								
Revenues from Charges								
Suburban Wholesale Customers	\$267,200,190	\$ 287,517,600	\$301,556,600	\$ 14,039,000	4.9%	\$317,570,900	\$ 16,014,300	5.3%
Local System Charges	196,569,600	205,924,800	217,909,900	11,985,100	5.8%	229,996,100	12,086,200	5.5%
Industrial Waste Control Charges	8,617,495	8,719,300	9,213,500	494,200	5.7%	9,711,900	498,400	5.4%
Pollutant Surcharges	4,088,519	5,434,400	5,742,400	308,000	5.7%	6,053,000	310,600	5.4%
Total Revenue from Charges	476,475,804	507,596,100	534,422,400	26,826,300	5.3%	563,331,900	28,909,500	5.4%
Other Operating Revenue	(827,846)	700,000	450,000	(250,000)	-35.7%	450,000	-	0.0%
Investment Earnings								
Unrestricted	16,344,105	10,494,500	10,331,200	(163,300)	-1.6%	11,369,800	1,038,600	10.1%
Restricted for Debt Service	6,824,701	1,861,500	4,081,400	2,219,900	119.3%	4,338,300	256,900	6.3%
Total Investment Earnings	23,168,806	12,356,000	14,412,600	2,056,600	16.6%	15,708,100	1,295,500	9.0%
Total Revenues	\$498,816,764	\$ 520,652,100	\$549,285,000	\$ 28,632,900	5.5%	\$579,490,000	\$ 30,205,000	5.5%
Revenue Requirements								
Operations & Maintenance Expense	\$222,673,733	\$228,934,000	\$242,124,500	\$13,190,500	5.8%	\$250,889,700	\$8,765,200	3.6%
Debt Service	229,316,502	226,279,400	222,402,500	(3,876,900)	-1.7%	243,463,300	21,060,800	9.5%
General Retirement System Pension	3,096,800	4,846,300	3,648,800	(1,197,500)	-24.7%	3,262,300	(386,500)	-10.6%
Water Residential Assistance Program Contribution	2,503,104	2,651,700	2,661,100	9,400	0.4%	2,804,900	143,800	5.4%
Extraordinary Repair & Replacement Deposit	-	-	364,900	364,900	100.0%	-	(364,900)	-100.0%
Regional System Lease	27,500,000	27,500,000	27,500,000	-	0.0%	27,500,000	-	0.0%
Receiving Fund Working Capital Requirement	-	2,300,000	-	(2,300,000)	-100.0%	3,100,000	3,100,000	100.0%
Improvement & Extension Fund Transfer Pending	13,399,600	28,140,700	50,583,200	22,442,500	79.8%	48,469,800	(2,113,400)	-4.2%
Annual Water System Revenue Requirements	\$498,489,739	\$ 520,652,100	\$549,285,000	\$ 28,632,900	5.5%	\$579,490,000	\$ 30,205,000	5.5%

The revenue requirement schedule is the basis for charges.

In last year's adopted FY 2026 Biennial Budget, the expected adjustment was 5.4% for suburban wholesale and 5.6% for the local system.

Through careful planning, the **preliminary** increase is lower for suburban wholesale at 4.9% and approximately the same at 5.8% for the local system.

The differential in the percentages between suburban and local is due to a higher effective rate for the local system after a \$5.5M annual credit.

Final charges calculations will provide the actual proposed charge for each Member Partner.

1D - Sewer System Five Year Plan

	Actual	Adopted Budget	Proposed Budget		Projected		
Sewer System Revenue Requirements	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Revenues							
Revenues from Charges							
Suburban Wholesale Customers	\$ 267,200,190	\$ 287,517,600	\$ 301,556,600	\$ 317,570,900	\$ 334,037,700	\$ 353,369,400	\$ 369,590,100
Local System Charges	196,569,600	205,924,800	217,909,900	229,996,100	242,423,900	257,013,700	269,255,700
Industrial Waste Control Charges	8,617,495	8,719,300	9,213,500	9,711,900	10,224,400	10,826,000	11,330,800
Pollutant Surcharges	4,088,519	5,434,400	5,742,400	6,053,000	6,372,400	6,747,400	7,062,000
Total Revenue from Charges	476,475,804	507,596,100	534,422,400	563,331,900	593,058,400	627,956,500	657,238,600
Other Operating Revenue	(827,846)	700,000	450,000	450,000	450,000	450,000	450,000
Investment Earnings							
Unrestricted	16,344,105	10,494,500	10,331,200	11,369,800	13,000,800	11,206,600	9,200,000
Restricted for Debt Service	6,824,701	1,861,500	4,081,400	4,338,300	4,840,400	5,359,000	3,901,200
Total Investment Earnings	23,168,806	12,356,000	14,412,600	15,708,100	17,841,200	16,565,600	13,101,200
Total Revenues	\$ 498,816,764	\$ 520,652,100	\$ 549,285,000	\$ 579,490,000	\$ 611,349,600	\$ 644,972,100	\$ 670,789,800
Revenue Requirements							
Operations & Maintenance Expense	\$222,673,733	\$228,934,000	\$242,124,500	\$250,889,700	\$260,768,400	\$265,690,500	\$271,475,300
Debt Service	229,316,502	226,279,400	222,402,500	243,463,300	249,692,500	255,714,600	260,026,100
General Retirement System Pension	3,096,800	4,846,300	3,648,800	3,262,300	2,939,200	2,869,200	3,836,500
Water Residential Assistance Program Contribution	2,503,104	2,651,700	2,661,100	2,804,900	2,952,800	3,126,400	3,272,100
Extraordinary Repair & Replacement Deposit	-	-	364,900	-	-	-	-
Regional System Lease	27,500,000	27,500,000	27,500,000	27,500,000	27,500,000	27,500,000	27,500,000
Receiving Fund Working Capital Requirement	-	2,300,000	-	3,100,000	5,500,000	5,600,000	4,200,000
Improvement & Extension Fund Transfer Pending	13,399,600	28,140,700	50,583,200	48,469,800	61,996,700	84,471,400	100,479,800
Annual Water System Revenue Requirements	\$ 498,489,739	\$ 520,652,100	\$ 549,285,000	\$ 579,490,000	\$ 611,349,600	\$ 644,972,100	\$ 670,789,800
<i>Change in Annual Revenue Requirement</i>			5.5%	5.5%	5.5%	5.5%	4.0%

1E – Combined Water & Sewer Biennial Budget

Combined Water & Sewer System Revenue Requirements	FY 2024	FY 2025	FY 2026			FY 2027		
	Actual	Adopted Budget	Proposed Budget	Dollar Variance	Percent Variance	Proposed Budget	Dollar Variance	Percent Variance
Revenues								
Revenues from Charges								
Suburban Wholesale Customers	\$593,568,026	\$ 635,275,600	\$673,455,300	\$ 38,179,700	6.0%	\$ 716,377,100	\$ 42,921,800	6.4%
Local System Charges	222,106,800	233,019,600	248,532,500	15,512,900	6.7%	264,550,800	16,018,300	6.4%
Industrial Waste Control Charges	8,617,495	8,719,300	9,213,500	494,200	5.7%	9,711,900	498,400	5.4%
Pollutant Surcharges	4,088,519	5,434,400	5,742,400	308,000	5.7%	6,053,000	310,600	5.4%
Total Revenue from Charges	828,380,840	882,448,900	936,943,700	54,494,800	6.2%	996,692,800	59,749,100	6.4%
Other Operating Revenue	74,073	1,100,000	750,000	(350,000)	-31.8%	750,000	-	0.0%
Investment Earnings								
Unrestricted	29,688,045	17,186,700	18,215,600	1,028,900	6.0%	19,242,700	1,027,100	5.6%
Restricted for Debt Service	11,817,156	5,043,600	7,383,500	2,339,900	46.4%	7,861,900	478,400	6.5%
Total Investment Earnings	41,505,201	22,230,300	25,599,100	3,368,800	15.2%	27,104,600	1,505,500	5.9%
Total Revenues	\$869,960,114	\$ 905,779,200	\$963,292,800	\$ 57,513,600	6.3%	\$ 1,024,547,400	\$ 61,254,600	6.4%
Revenue Requirements								
Operations & Maintenance Expense	\$383,710,916	\$398,559,000	\$424,580,500	\$26,021,500	6.5%	\$444,365,400	\$19,784,900	4.7%
Debt Service	389,938,919	401,580,200	408,385,500	6,805,300	1.7%	446,496,300	38,110,800	9.3%
General Retirement System Pension	4,602,300	7,129,600	5,271,000	(1,858,600)	-26.1%	4,712,700	(558,300)	-10.6%
Water Residential Assistance Program Contribution	4,354,704	4,599,500	4,665,200	65,700	1.4%	4,962,400	297,200	6.4%
Extraordinary Repair & Replacement Deposit	2,836,000	-	1,609,400	1,609,400	100.0%	892,200	(717,200)	-44.6%
Regional System Lease	50,000,000	50,000,000	50,000,000	-	0.0%	50,000,000	-	0.0%
Receiving Fund Working Capital Requirement	-	8,500,000	1,600,000	(6,900,000)	-81.2%	4,200,000	2,600,000	162.5%
Improvement & Extension Fund Transfer Pending	29,167,500	35,410,900	67,181,200	31,770,300	89.7%	68,918,400	1,737,200	2.6%
Annual Water System Revenue Requirements	\$864,610,339	\$ 905,779,200	\$963,292,800	\$ 57,513,600	6.3%	\$ 1,024,547,400	\$ 61,254,600	6.4%

1F – Combined Water & Sewer Five Year Plan

	Actual	Adopted Budget	Proposed Budget		Projected		
Combined Water & Sewer System Revenue Requirements	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Revenues							
Revenues from Charges							
Suburban Wholesale Customers	\$ 593,568,026	\$ 635,275,600	\$ 673,455,300	\$ 716,377,100	\$ 760,992,500	\$ 809,988,700	\$ 855,917,600
Local System Charges	222,106,800	233,019,600	248,532,500	264,550,800	281,092,100	300,016,900	316,600,300
Industrial Waste Control Charges	8,617,495	8,719,300	9,213,500	9,711,900	10,224,400	10,826,000	11,330,800
Pollutant Surcharges	4,088,519	5,434,400	5,742,400	6,053,000	6,372,400	6,747,400	7,062,000
Total Revenue from Charges	828,380,840	882,448,900	936,943,700	996,692,800	1,058,681,400	1,127,579,000	1,190,910,700
Other Operating Revenue	74,073	1,100,000	750,000	750,000	750,000	750,000	750,000
Investment Earnings							
Unrestricted	29,688,045	17,186,700	18,215,600	19,242,700	21,431,000	20,850,400	16,878,400
Restricted for Debt Service	11,817,156	5,043,600	7,383,500	7,861,900	8,921,500	10,102,300	7,431,400
Total Investment Earnings	41,505,201	22,230,300	25,599,100	27,104,600	30,352,500	30,952,700	24,309,800
Total Revenues	\$ 869,960,114	\$ 905,779,200	\$ 963,292,800	\$ 1,024,547,400	\$ 1,089,783,900	\$ 1,159,281,700	\$ 1,215,970,500
Revenue Requirements							
Operations & Maintenance Expense	\$383,710,916	\$398,559,000	\$424,580,500	\$444,365,400	\$458,927,800	\$464,742,800	\$474,956,200
Debt Service	389,938,919	401,580,200	408,385,500	446,496,300	463,066,900	482,100,100	497,068,800
General Retirement System Pension	4,602,300	7,129,600	5,271,000	4,712,700	4,245,900	4,144,800	5,660,600
Water Residential Assistance Program Contribution	4,354,704	4,599,500	4,665,200	4,962,400	5,270,800	5,613,600	5,928,700
Extraordinary Repair & Replacement Deposit	2,836,000	-	1,609,400	892,200	-	-	-
Regional System Lease	50,000,000	50,000,000	50,000,000	50,000,000	50,000,000	50,000,000	50,000,000
Receiving Fund Working Capital Requirement	-	8,500,000	1,600,000	4,200,000	6,900,000	10,700,000	8,600,000
Improvement & Extension Fund Transfer Pending	29,167,500	35,410,900	67,181,200	68,918,400	101,372,500	141,980,400	173,756,200
Annual Water System Revenue Requirements	\$ 864,610,339	\$ 905,779,200	\$ 963,292,800	\$ 1,024,547,400	\$ 1,089,783,900	\$ 1,159,281,700	\$ 1,215,970,500
<i>Change in Annual Revenue Requirement</i>			6.3%	6.4%	6.4%	6.4%	4.9%

2A – Combined O&M Biennial Budget

- ◆ The operations and maintenance budget provides for the daily operations of GLWA's water and wastewater systems.
- ◆ The appendices to this report provide extensive analysis.
 - ◆ Appendix 1 – Analysis of Personnel Costs
 - ◆ Appendix 4 - Utility Cost Review - September 2024 – Presented to GLWA Board of Directors, October 9, 2024

2A – Combined O&M Biennial Budget

Expense Category	FY 2024	FY 2025	FY 2026			FY 2027		
	Actual	Adopted Budget	Proposed	Dollar Variance	Percent Variance	Proposed	Dollar Variance	Percent Variance
2.1 Salaries & Wages	\$ 77,594,600	\$ 81,643,800	\$ 86,639,500	\$ 4,995,700	6.1%	\$ 91,967,900	\$ 5,328,400	6.2%
2.2 Workforce Development	1,949,200	2,105,000	3,792,800	1,687,800	80.2%	4,253,000	460,200	12.1%
2.3 Overtime	9,171,300	8,074,200	8,911,200	837,000	10.4%	8,991,200	80,000	0.9%
2.4 Employee Benefits	28,034,900	30,861,400	31,726,700	865,300	2.8%	34,017,600	2,290,900	7.2%
2.5 Transition Services	9,249,300	8,198,000	7,863,000	(335,000)	-4.1%	7,864,800	1,800	0.0%
Total Personnel Costs	125,999,300	130,882,400	138,933,200	8,050,800	6.2%	147,094,499	8,161,300	5.9%
3.1 Electric	49,805,500	49,020,700	51,308,100	2,287,400	4.7%	52,621,700	1,313,600	2.6%
3.2 Gas	7,211,200	7,000,000	7,112,600	112,600	1.6%	7,153,100	40,500	0.6%
3.3 Sewage Service	2,336,500	2,980,100	2,455,300	(524,800)	-17.6%	2,472,400	17,100	0.7%
3.4 Water Service	12,586,100	11,601,700	12,202,800	601,100	5.2%	12,446,800	244,000	2.0%
Total Utility Costs	71,939,300	70,602,500	73,078,800	2,476,300	3.5%	74,694,000	1,615,200	2.2%
4.1 Chemicals	31,075,400	34,834,900	38,364,600	3,529,700	10.1%	38,565,800	201,200	0.5%
4.2 Supplies & Other	43,058,700	43,024,600	45,248,600	2,224,000	5.2%	45,845,400	596,800	1.3%
4.3 Contractual Services	119,298,200	114,508,700	123,550,400	9,041,700	7.9%	126,235,400	2,685,000	2.2%
5.1 Capital Program Allocation	(2,847,300)	(4,581,800)	(3,739,600)	842,200	-18.4%	(4,669,000)	(929,400)	24.9%
5.2 Shared Services	(2,280,400)	(2,279,500)	(2,339,100)	(59,600)	2.6%	(2,417,000)	(77,900)	3.3%
5.5 Intergovernmental Agreement	(2,532,100)	(638,200)	-	638,200	100.0%	-	-	0.0%
6.0 Capital Outlay	-	-	-	-	0.0%	-	-	0.0%
7.0 Unallocated Reserve	-	12,205,400	11,483,800	(721,600)	-5.9%	19,016,300	7,532,500	65.6%
Total Other Categories	185,772,500	197,074,100	212,568,700	15,494,600	7.9%	222,576,900	10,008,200	4.7%
Grand Total	\$ 383,711,100	\$ 398,559,000	\$ 424,580,700	\$ 26,021,700	6.5%	\$ 444,365,400	\$ 19,784,700	4.7%

Capital Program Activities

- ◆ There are four capital related budgets
 - ◆ 5A – Water Improvement and Extension Fund
 - ◆ 5B – Sewer Improvement and Extension Fund
 - ◆ 5C – Water Construction Fund
 - ◆ 5D – Sewer Construction Fund
- ◆ See also Appendix 5 - Capital Improvement Plan FY 2026 – 2030
 - ◆ Discussion Draft 2 – GLWA Board Capital Planning Committee Meeting December 10, 2024

5A – Water Improvement and Extension Fund

Water Improvement & Extension Fund	Adopted Budget	Proposed Budget		Projected		
	FY 2025	FY 2026	FY 2027	FY 2027	FY 2028	FY 2029
Inflows						
Transfers in from Water Operations Fund						
Revenue Transfers	\$ 7,270,200	\$ 16,598,000	\$ 20,448,600	\$ 39,375,800	\$ 57,509,000	\$ 73,276,400
Investment Earnings	938,700	3,270,800	2,939,500	3,126,000	3,919,400	3,639,700
Total Inflows	8,208,900	19,868,800	23,388,100	42,501,800	61,428,400	76,916,100
Outflows						
Capital outlay	10,527,800	13,738,000	9,089,100	9,537,800	8,743,300	8,764,100
Transfers out to Water Operations Fund						
Investment Earnings	938,700	3,270,800	2,939,500	3,126,000	3,919,400	3,639,700
Transfer out to Water Construction Fund						
Revenue Financed Capital	15,000,000	9,250,000	11,750,000	14,500,000	11,000,000	7,250,000
Total Outflows	26,466,500	26,258,800	23,778,600	27,163,800	23,662,700	19,653,800
Net Inflow (Outflow) - Use of I&E Funds	\$ (18,257,600)	(6,390,000)	(390,500)	15,338,000	37,765,700	57,262,300
Beginning Cash Available		99,265,300	92,875,300	92,484,800	107,822,800	145,588,500
Projected Ending Cash Available		\$ 92,875,300	\$ 92,484,800	\$ 107,822,800	\$ 145,588,500	\$ 202,850,800

Investment earnings are transferred to the water operating fund to offset pressure on charges. The largest expenses are a) capital outlay (generally for equipment needed outside of capital projects) and b) transfer to the water construction fund to support the capital improvement fund).

5B – Sewer Improvement and Extension Fund

Sewer Improvement & Extension Fund	Adopted Budget	Proposed Budget		Projected		
	FY 2025	FY 2026	FY 2027	FY 2027	FY 2028	FY 2029
Inflows						
Transfers in from Water Operations Fund						
Revenue Transfers	\$ 28,140,700	\$ 50,583,200	\$ 48,469,800	\$ 61,996,700	\$ 84,471,400	\$ 100,479,800
Investment Earnings	1,076,000	5,243,900	5,915,100	7,070,800	4,629,300	4,536,400
Total Inflows	29,216,700	55,827,100	54,384,900	69,067,500	89,100,700	105,016,200
Outflows						
Capital outlay	12,071,300	14,089,800	14,416,000	16,092,400	8,563,300	8,563,200
Transfers out to Water Operations Fund						
Investment Earnings	1,076,000	5,243,900	5,915,100	7,070,800	4,629,300	4,536,400
Transfer out to Water Construction Fund						
Revenue Financed Capital	5,500,000	8,750,000	11,750,000	127,744,500	21,805,000	104,843,400
Total Outflows	18,647,300	28,083,700	32,081,100	150,907,700	34,997,600	117,943,000
Net Inflow (Outflow) - Use of I&E Funds	\$ 10,569,400	27,743,400	22,303,800	(81,840,200)	54,103,100	(12,926,800)
Beginning Cash Available		159,147,100	186,890,500	209,194,300	127,354,100	181,457,200
Projected Ending Cash Available		\$ 186,890,500	\$ 209,194,300	\$ 127,354,100	\$ 181,457,200	\$ 168,530,400

Investment earnings are transferred to the sewer operating fund to offset pressure on charges. The largest expenses are a) capital outlay (generally for equipment needed outside of capital projects) and b) transfer to the sewer construction fund to support the capital improvement fund).

5C – Water Construction Fund

Water Construction Fund	Adopted Budget	Proposed Budget		Projected		
	FY 2025	FY 2026	FY 2027	FY 2027	FY 2028	FY 2029
Inflows						
Transfers in from Water Improvement & Extension Fund						
Revenue Financed Capital	\$ 15,000,000	\$ 9,250,000	\$ 11,750,000	\$ 14,500,000	\$ 11,000,000	\$ 7,250,000
Transfers in from Water Operations Fund						
Bond Proceeds	271,562,500	350,000,000	-	350,000,000	-	200,000,000
State Revolving Loans	30,800,000	18,358,800	-	-	-	-
Grants and Capital Contributions	-	2,300,000	2,000,000	-	-	-
Investment Earnings	7,953,300	14,087,800	13,519,500	12,370,400	11,261,000	6,173,300
Total Inflows	325,315,800	393,996,600	27,269,500	376,870,400	22,261,000	213,423,300
Outflows						
Capital Program	210,000,000	185,000,000	235,000,000	290,000,000	220,000,000	145,000,000
Transfers out to Water Operations Fund						
Bond Cost of Issuance	-	2,625,000	-	2,625,000	-	1,500,000
Total Outflows	210,000,000	187,625,000	235,000,000	292,625,000	220,000,000	146,500,000
Net Inflow (Outflow) - Use of Construction Funds	\$ 115,315,800	206,371,600	(207,730,500)	84,245,400	(197,739,000)	66,923,300
Beginning Cash Available		331,408,443	537,780,043	330,049,543	414,294,943	216,555,943
Projected Ending Cash Available		\$ 537,780,043	\$ 330,049,543	\$ 414,294,943	\$ 216,555,943	\$ 283,479,243

Investment earnings are restricted and remain in the construction fund. The largest expense is delivery of projects as outlined in the capital improvement plan.

5D – Sewer Construction Fund

Sewer Construction Fund	Adopted Budget	Proposed Budget		Projected		
	FY 2025	FY 2026	FY 2027	FY 2027	FY 2028	FY 2029
Inflows						
Transfers in from Water Improvement & Extension Fund						
Revenue Financed Capital	\$ 15,000,000	\$ 8,750,000	\$ 11,750,000	\$ 127,744,500	\$ 21,805,000	\$ 104,843,400
Transfers in from Water Operations Fund						
Bond Proceeds	271,562,500	150,000,000	-	150,000,000	-	100,000,000
State Revolving Loans	30,800,000	66,931,100	84,170,600	95,000,000	91,887,500	72,500,000
Grants and Capital Contributions	-	21,676,000	-	-	-	-
Investment Earnings	7,953,300	6,319,700	5,196,700	4,838,800	4,385,800	2,442,100
Total Inflows	325,315,800	253,676,800	101,117,300	377,583,300	118,078,300	279,785,500
Outflows						
Capital Program	210,000,000	175,000,000	235,000,000	285,000,000	255,000,000	190,000,000
Transfers out to Water Operations Fund						
Bond Cost of Issuance	-	1,125,000	-	1,125,000	-	750,000
Total Outflows	210,000,000	176,125,000	235,000,000	286,125,000	255,000,000	190,750,000
Net Inflow (Outflow) - Use of Construction Funds	\$ 115,315,800	77,551,800	(133,882,700)	91,458,300	(136,921,700)	89,035,500
Beginning Cash Available		156,180,100	233,731,900	99,849,200	191,307,500	54,385,800
Projected Ending Cash Available		\$ 233,731,900	\$ 99,849,200	\$ 191,307,500	\$ 54,385,800	\$ 143,421,300

Investment earnings are restricted and remain in the construction fund. The largest expense is delivery of projects as outlined in the capital improvement plan.

APPENDIX 1 – ANALYSIS OF PERSONNEL COSTS

Table 1 - Budget by “Worker Type” in Workday System

GLWA's personnel budget is largely attributable to regularly assigned team members. GLWA's human resource system implemented last year provides for tracking of contractors, classified as "contingent" workers in the system. Contingent workers are procured through a competitively bid contract to fill vacant positions in operating areas. These contracts are awarded to vendors who are knowledgeable in the skilled trades and operations. Apprentices participate in a multiple year program with intensive training and supervision. Interns include the full range of students from high school to doctoral candidates.

Table 1 provides insight into budget resource allocation amount worker type.

<i>Table 1 - Worker Type</i>	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Regular	\$ 112,113,156	\$ 120,334,399	\$ 125,232,963	\$ 132,738,364	\$ 145,684,297	\$ 146,278,029	\$ 146,554,955
A Water System Operations	22,158,198	24,115,596	25,084,994	27,037,052	29,854,790	29,910,808	29,966,826
B Wastewater System Operations	33,837,985	36,243,320	36,454,044	39,373,103	44,794,769	45,206,229	45,296,884
C Centralized Services	37,201,424	39,853,061	42,028,129	43,947,020	46,992,557	47,079,791	47,167,024
D Administrative & Other Services	18,915,548	20,122,421	21,665,796	22,381,189	24,042,181	24,081,201	24,124,221
Contingent	6,163,066	6,469,729	7,740,810	7,740,810	7,740,810	7,740,810	7,740,810
B Wastewater System Operations	5,444,075	5,568,026	6,616,170	6,616,170	6,616,170	6,616,170	6,616,170
C Centralized Services	666,805	810,624	1,033,560	1,033,560	1,033,560	1,033,560	1,033,560
D Administrative & Other Services	52,187	91,080	91,080	91,080	91,080	91,080	91,080
Apprentice	2,397,747	3,170,096	4,532,294	4,995,043	5,007,444	5,019,845	5,032,246
A Water System Operations	1,136,857	1,578,443	2,422,598	2,783,124	2,790,607	2,798,090	2,805,574
B Wastewater System Operations	443,122	667,410	789,690	889,133	891,272	893,410	895,548
C Centralized Services	817,768	924,243	1,320,007	1,322,786	1,325,566	1,328,345	1,331,125
Intern	28,126	28,126	1,178,171	1,322,436	1,322,650	1,322,864	1,323,077
A Water System Operations			80,981	141,731	141,731	141,731	141,731
B Wastewater System Operations			173,954	239,002	239,002	239,002	239,002
C Centralized Services	28,126	28,126	750,378	768,844	769,058	769,272	769,485
D Administrative & Other Services			172,858	172,858	172,858	172,858	172,858
Grand Total	\$ 120,702,095	\$ 130,002,350	\$ 138,684,239	\$ 146,796,654	\$ 159,755,201	\$ 160,361,548	\$ 160,651,088

Tables 2A and 2B Personnel - Full-time Equivalents Compared to Staffing Plan

The GLWA has a staffing plan for each area that includes both regular employees as well as positions filled by contractors, apprentices, and interns. Many of the contractors fill skilled trades positions. The apprenticeship and intern programs are successful models of workforce development efforts that have resulted in successful regular placement in team member positions at GLWA.

The staffing plan counts each position as one. The full-time equivalent is a percentage of each position. Most vacant positions are budgeted at 25% for the upcoming FY 2025 and at 50% for FY 2026. Budgeting at 100% full employment in the short term is not realistic. By applying a factor to vacant positions, such as the 25% or 50% for the next two years, we can account for turnover and budget at a more appropriate level. In recent years, the vacancy rate has become lower thanks to successful recruiting efforts. The vacancy rate is consistent at 13%. That amount increases to 16% when the impact on contractors is considered.

Table 2A provides a summary of GLWA's full-time equivalents that are reflected in the budget versus the staffing plan.

Table 2A - Full-time Equivalents	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Regular	1,077.50	1,118.25	1,078.00	1,154.13	1,275.50	1,277.50	1,277.50
A Water System Operations	215.00	228.25	220.00	238.25	261.50	261.50	261.50
B Wastewater System Operations	346.50	354.25	332.00	366.13	423.00	425.00	425.00
C Centralized Services	357.50	370.75	362.00	380.00	408.50	408.50	408.50
D Administrative & Other Services	158.50	165.00	164.00	169.75	182.50	182.50	182.50
Contingent	43.00	41.75	46.00	46.00	46.00	46.00	46.00
B Wastewater System Operations	36.50	34.75	39.00	39.00	39.00	39.00	39.00
C Centralized Services	6.00	6.00	6.00	6.00	6.00	6.00	6.00
D Administrative & Other Services	0.50	1.00	1.00	1.00	1.00	1.00	1.00
Apprentice	32.25	43.00	50.25	58.00	58.00	58.00	58.00
A Water System Operations	16.25	23.75	29.00	35.00	35.00	35.00	35.00
B Wastewater System Operations	6.50	8.75	8.25	10.00	10.00	10.00	10.00
C Centralized Services	9.50	10.50	13.00	13.00	13.00	13.00	13.00
Intern	0.50	0.50	31.25	35.25	35.25	35.25	35.25
A Water System Operations			2.25	4.00	4.00	4.00	4.00
B Wastewater System Operations			4.75	6.50	6.50	6.50	6.50
C Centralized Services	0.50	0.50	19.75	20.25	20.25	20.25	20.25
D Administrative & Other Services			4.50	4.50	4.50	4.50	4.50
Grand Total	1,153.25	1,203.50	1,205.50	1,293.38	1,414.75	1,416.75	1,416.75

Table 2B provides a summary of GLWA's staffing plan.

Table 2B - Staffing Plan	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Regular	1,225.00	1,260.00	1,274.00	1,278.00	1,282.00	1,282.00	1,277.50
A Water System Operations	245.00	258.00	262.00	262.00	262.00	262.00	261.50
B Wastewater System Operations	406.00	416.00	419.00	422.00	425.00	425.00	425.00
C Centralized Services	396.00	404.00	410.00	411.00	411.00	411.00	408.50
D Administrative & Other Services	178.00	182.00	183.00	183.00	184.00	184.00	182.50
Contingent	45.00	45.00	46.00	46.00	46.00	46.00	46.00
B Wastewater System Operations	38.00	38.00	39.00	39.00	39.00	39.00	39.00
C Centralized Services	6.00	6.00	6.00	6.00	6.00	6.00	6.00
D Administrative & Other Services	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Apprentice	47.00	50.00	58.00	58.00	58.00	58.00	58.00
A Water System Operations	28.00	29.00	35.00	35.00	35.00	35.00	35.00
B Wastewater System Operations	8.00	9.00	10.00	10.00	10.00	10.00	10.00
C Centralized Services	11.00	12.00	13.00	13.00	13.00	13.00	13.00
Intern	1.00	1.00	41.00	41.00	41.00	41.00	35.25
A Water System Operations			4.00	4.00	4.00	4.00	4.00
B Wastewater System Operations			7.00	7.00	7.00	7.00	6.50
C Centralized Services	1.00	1.00	23.00	23.00	23.00	23.00	20.25
D Administrative & Other Services			7.00	7.00	7.00	7.00	4.50
Grand Total	1,318.00	1,356.00	1,419.00	1,423.00	1,427.00	1,427.00	1,416.75
Variance - FTE vs. Staffing Plan	164.75	164.75	164.75	164.75	164.75	164.75	164.75
Vacancy Rate (without contractors)	13%	13%	13%	13%	13%	13%	13%
Vacancy Rate (with contractors)	16%	16%	16%	16%	16%	16%	16%

Table 3 - Full-time Equivalents by Service Area

The GLWA has four main categories for tracking operations and maintenance costs. These are:

- A - Direct operating cost of water system operations
- B - Direct operating cost of wastewater system operations
- C - Centralized services that support the entire organization
- D - Administrative services that provide the organization with specialized support

With a strong culture of cross-functional engagement, GLWA garners efficiencies by focusing on its mission as a whole and not individual parts. This allows us to effectively service a population of nearly 4 million people with water services and nearly 3 million with wastewater services. The following table provides the allocation of team member resources in carrying out that mission. Table 3 is organized by full-time equivalent (FTE) resources organized by cost center within the four main categories.

Table 3 - Full-time Equivalents	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
☐ A Water System Operations	231.25	252.00	251.25	277.25	300.50	300.50	300.50
882001 COO - Water Operations & Field Services	5.00	7.25	8.25	8.50	9.00	9.00	9.00
882101 Water Director	10.50	13.25	15.50	16.75	17.50	17.50	17.50
882111 Water Engineering	23.75	26.00	26.25	35.50	48.00	48.00	48.00
882121 Water Quality	25.00	28.50	28.50	29.50	31.00	31.00	31.00
882131 Water Works Park	34.75	36.75	37.00	42.00	44.00	44.00	44.00
882141 Springwells Water Plant	33.50	35.25	35.25	37.50	39.00	39.00	39.00
882151 Northeast Water Plant	32.25	34.75	35.00	36.50	38.00	38.00	38.00
882161 Southwest Water Plant	32.00	35.50	30.75	34.00	36.00	36.00	36.00
882171 Lake Huron Water Plant	34.50	34.75	34.75	37.00	38.00	38.00	38.00

Table 3 - Full-time Equivalents	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
B Wastewater System Operations	389.50	397.75	384.00	421.63	478.50	480.50	480.50
892001 Chief Operating Officer Wastewater	12.25	15.25	14.50	16.00	19.00	19.00	19.00
892201 Wastewater Director	46.25	45.50	43.25	49.00	56.00	56.00	56.00
892211 Wastewater Engineering	29.50	33.50	26.25	31.63	44.00	46.00	46.00
892221 Wastewater Operations	12.50	16.75	17.25	19.50	23.00	23.00	23.00
892222 Wastewater Process Control	21.25	20.50	19.00	22.00	27.00	27.00	27.00
892223 Wastewater Primary Process	44.75	43.25	41.75	47.50	52.00	52.00	52.00
892224 Wastewater Secondary Process	43.25	43.75	43.00	45.50	49.00	49.00	49.00
892225 Wastewater Dewatering Process	37.00	36.50	38.00	40.50	43.00	43.00	43.00
892226 Wastewater Incineration Process	46.75	48.00	46.00	50.00	57.00	57.00	57.00
892227 BDF, COF & Hauling	8.25	7.75	7.00	7.00	7.00	7.00	7.00
892231 Industrial Waste Control	25.75	25.25	27.00	28.50	30.00	30.00	30.00
892235 Wastewater Laboratories	32.50	33.00	30.50	33.50	39.50	39.50	39.50
892270 Combined Sewer Overflow	29.50	28.75	30.50	31.00	32.00	32.00	32.00

Table 3 - Full-time Equivalents		FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
☐ C	Centralized Services	373.50	387.75	400.75	419.25	447.75	447.75	447.75
	881201 Security and Integrity	57.50	60.25	60.75	61.50	63.00	63.00	63.00
	881202 HazMat	18.50	19.50	18.50	19.00	20.00	20.00	20.00
	881203 Office of Emergency Preparedness	2.50	3.00	3.00	3.00	3.00	3.00	3.00
	881301 System Resiliency		7.25	6.75	7.00	7.50	7.50	7.50
	882301 Systems Operations Control	39.75	40.00	39.75	42.00	45.00	45.00	45.00
	882421 Facility Operations	18.00	18.50	16.25	18.50	23.00	23.00	23.00
	882422 Fleet Operations	5.50	6.00	6.25	6.50	7.00	7.00	7.00
	882431 Field Service Operations	66.25	68.00	64.75	67.50	73.00	73.00	73.00
	882501 Energy, Research & Innovation	7.50	5.00	13.00	14.50	15.50	15.50	15.50
	882511 Transformation	5.00	3.00	3.00	3.00	3.00	3.00	3.00
	883301 Office of the CIO	6.00	5.50	5.75	6.50	8.00	8.00	8.00
	883311 Info Technology Project Management Office	11.00	11.00	10.25	10.50	11.00	11.00	11.00
	883321 Info Technology Service Delivery	14.00	15.00	15.25	15.50	16.00	16.00	16.00
	883331 Info Technology Infrastructure	13.00	12.25	13.00	13.00	13.00	13.00	13.00
	883341 Info Technology Business Productivity Systems	9.50	9.00	9.75	10.50	12.00	12.00	12.00
	883351 Info Technology Enterprise Asset Mgmt Systems	16.00	15.75	18.00	18.00	18.00	18.00	18.00
	883361 Info Technology Security & Risk	2.00	3.00	4.00	4.00	4.00	4.00	4.00
	884124 Logistics and Materials	23.00	25.00	25.00	25.25	25.75	25.75	25.75
	886001 Chief Planning Officer	2.00	2.00	2.00	2.00	2.00	2.00	2.00
	886100 Systems Planning & Development	3.00	2.50	3.00	4.00	4.00	4.00	4.00
	886101 Systems Planning	3.50	4.00	3.25	3.50	4.00	4.00	4.00
	886201 Asset Management	7.00	6.50	12.75	13.50	15.00	15.00	15.00
	886401 Systems Analytics	34.50	36.50	35.50	37.50	40.00	40.00	40.00
	886601 Capital Improvement Planning	8.50	9.25	11.25	13.00	15.00	15.00	15.00

Table 3 - Full-time Equivalents		FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
D	Administrative & Other Services	159.00	166.00	169.50	175.25	188.00	188.00	188.00
	881001 Chief Executive Officer	2.00	2.00	2.00	2.00	2.00	2.00	2.00
	881101 Public Affairs	8.00	8.50	9.25	9.50	10.00	10.00	10.00
	883001 Chief Administrative Officer	4.50	4.75	4.75	5.50	7.00	7.00	7.00
	883101 General Counsel	7.50	8.00	8.25	8.50	9.00	9.00	9.00
	883201 Organizational Development Administration	4.00	4.75	4.25	4.50	5.00	5.00	5.00
	883211 Organizational Development Talent Management	22.75	21.50	22.75	24.00	26.50	26.50	26.50
	883231 Organizational Development Training	12.50	14.00	13.75	14.00	14.50	14.50	14.50
	883401 Enterprise Risk Management and Safety	5.75	6.75	7.50	8.00	9.00	9.00	9.00
	884001 Chief Financial Officer	3.50	4.50	6.50	6.50	6.50	6.50	6.50
	884111 Financial Reporting & Accounting	27.00	26.75	25.50	26.00	27.00	27.00	27.00
	884113 Financial Management & Planning	10.50	12.00	11.00	11.00	12.00	12.00	12.00
	884121 Procurement Director	32.50	31.25	32.00	33.00	35.00	35.00	35.00
	884131 Treasury	3.00	3.00	3.00	3.00	3.00	3.00	3.00
	884141 CFO Services	15.50	18.25	19.00	19.75	21.50	21.50	21.50
Grand Total		1,153.25	1,203.50	1,205.50	1,293.38	1,414.75	1,416.75	1,416.75

Table 4 - Total Personnel Budget by Cost Center

GLWA's personnel budget includes salaries & wages, contractor fees, overtime and fringe benefits.

GLWA has been able to successfully control fringe benefit costs by participating in a defined contribution plan and working with a professional insurance broker who consistently monitors the insurance and risk market. Wage adjustments are not budgeted at each cost center. Instead, an unallocated reserve is budgeted. Then, as circumstances are known, the Chief Executive Officer directs reallocation of funds for the unallocated reserve to the cost centers. In prior years GLWA completed a market and compensation study recognizing that certain positions had higher turnover rates because the wages were seen as below market. Through a series of incremental adjustments over the past few years, significant progress has been made to establish compensation levels for team members that is comparable to the market.

Table 4 provides the total personnel cost by cost center. To the extent there are increases in the totals in future years, the main driver is filling vacancies.

Table 4 - Personnel by Cost Center	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
⊟ A Water System Operations	23,295,056	25,694,039	27,588,574	29,961,907	32,787,129	32,850,630	32,914,131
882001 COO - Water Operations & Field Services	844,961	1,080,549	1,242,789	1,279,989	1,353,305	1,355,230	1,357,154
882101 Water Director	1,355,612	1,766,936	2,017,642	2,117,609	2,216,577	2,220,426	2,224,274
882111 Water Engineering	3,101,548	3,564,079	3,773,721	4,926,554	6,650,502	6,660,551	6,670,600
882121 Water Quality	1,989,233	2,291,414	2,394,840	2,485,706	2,646,015	2,652,643	2,659,271
882131 Water Works Park	3,361,042	3,609,249	3,994,947	4,303,771	4,505,660	4,514,640	4,523,620
882141 Springwells Water Plant	3,311,041	3,443,375	3,875,162	4,009,474	4,138,999	4,147,338	4,155,676
882151 Northeast Water Plant	3,186,573	3,330,073	3,765,861	3,904,100	4,042,309	4,050,434	4,058,559
882161 Southwest Water Plant	3,092,751	3,368,330	3,102,750	3,364,882	3,562,920	3,570,617	3,578,314
882171 Lake Huron Water Plant	3,052,295	3,240,035	3,420,862	3,569,820	3,670,840	3,678,751	3,686,662

Table 4 - Personnel by Cost Center	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
B Wastewater System							
Operations	39,725,182	42,478,756	44,033,857	47,117,409	52,541,212	52,954,811	53,047,604
892001 Chief Operating Officer Wastewater	1,608,164	2,178,979	2,305,517	2,454,326	2,782,498	2,786,560	2,790,622
892201 Wastewater Director	5,381,641	5,502,836	5,640,162	6,114,384	6,761,828	6,770,594	6,779,360
892211 Wastewater Engineering	3,342,278	4,386,872	3,675,532	4,334,937	5,971,563	6,302,204	6,312,039
892221 Wastewater Operations	1,442,544	1,913,702	1,946,761	2,101,253	2,393,782	2,398,486	2,403,189
892222 Wastewater Process Control	2,469,965	2,347,018	2,409,093	2,750,201	3,312,557	3,318,329	3,324,102
892223 Wastewater Primary Process	4,395,375	4,476,956	4,486,839	4,847,652	5,156,262	5,166,524	5,176,787
892224 Wastewater Secondary Process	4,166,805	4,416,813	4,915,206	5,084,145	5,339,186	5,348,380	5,357,574
892225 Wastewater Dewatering Process	3,393,787	3,402,548	3,832,960	4,007,514	4,201,884	4,209,581	4,217,278
892226 Wastewater Incineration Process	4,296,079	4,614,991	4,768,704	5,012,312	5,499,011	5,509,487	5,519,964
892227 BDF, COF & Hauling	796,191	805,684	792,995	793,850	794,705	795,560	796,415
892231 Industrial Waste Control	2,249,268	2,300,296	2,568,013	2,647,970	2,746,346	2,752,546	2,758,747
892235 Wastewater Laboratories	3,241,585	3,306,586	3,321,714	3,555,252	4,087,266	4,095,604	4,103,943
892270 Combined Sewer Overflow	2,941,499	2,825,474	3,370,361	3,413,614	3,494,327	3,500,955	3,507,583

Table 4 - Personnel by Cost Center	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
☐ C Centralized Services	38,714,123	41,616,054	45,132,074	47,072,210	50,120,740	50,210,967	50,301,194
881201 Security and Integrity	4,216,049	4,738,782	4,931,989	5,005,625	5,141,425	5,154,040	5,166,654
881202 HazMat	1,581,627	1,753,001	1,678,170	1,725,846	1,817,564	1,821,840	1,826,116
881203 Office of Emergency Preparedness	329,146	378,200	403,477	404,118	404,760	405,401	406,042
881301 System Resiliency		1,160,881	1,183,207	1,218,236	1,287,392	1,289,102	1,290,813
882301 Systems Operations Control	4,866,743	5,014,143	5,309,139	5,556,048	5,893,427	5,903,048	5,912,670
882421 Facility Operations	1,810,770	1,968,682	2,006,395	2,126,294	2,457,434	2,462,351	2,467,269
882422 Fleet Operations	617,980	646,271	716,511	734,168	768,517	770,014	771,510
882431 Field Service Operations	6,267,349	6,730,642	7,310,596	7,533,239	8,037,515	8,053,123	8,068,731
882501 Energy, Research & Innovation	981,941	670,147	823,316	1,179,543	1,315,931	1,317,427	1,318,924
882511 Transformation	706,068	391,481	411,398	412,039	412,680	413,322	413,963
883301 Office of the CIO	913,577	868,302	1,059,300	1,128,078	1,399,661	1,401,371	1,403,082
883311 Info Technology Project Management Office	1,401,944	1,472,953	1,503,585	1,520,869	1,582,223	1,584,575	1,586,927
883321 Info Technology Service Delivery	1,283,215	1,418,572	1,582,481	1,599,475	1,656,588	1,660,009	1,663,430
883331 Info Technology Infrastructure	1,528,511	1,493,292	1,700,938	1,703,717	1,706,497	1,709,276	1,712,056
883341 Info Technology Business Productivity Systems	1,102,985	1,376,896	1,464,200	1,560,646	1,752,150	1,754,502	1,756,854
883351 Info Technology Enterprise Asset Mgmt Systems	1,906,809	1,968,925	2,292,124	2,295,758	2,299,393	2,303,028	2,306,662
883361 Info Technology Security & Risk	292,034	451,723	620,553	621,408	622,264	623,119	623,974
884124 Logistics and Materials	1,906,454	2,089,231	2,300,961	2,226,762	2,263,315	2,268,661	2,274,006
886001 Chief Planning Officer	303,971	320,882	341,148	341,576	342,004	342,431	342,859
886100 Systems Planning & Development	478,992	364,393	459,072	590,698	591,553	592,408	593,263
886101 Systems Planning	455,926	521,158	459,253	489,532	549,979	550,834	551,689
886201 Asset Management	896,326	874,950	1,309,165	1,399,999	1,581,127	1,583,479	1,585,831
886401 Systems Analytics	3,715,488	3,758,320	3,892,484	4,135,538	4,439,000	4,446,483	4,453,966
886601 Capital Improvement Planning	1,150,220	1,184,226	1,372,614	1,562,998	1,798,343	1,801,123	1,803,902

Table 4 - Personnel by Cost Center	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
D Administrative & Other							
▣ Services	18,967,735	20,213,501	21,929,735	22,645,128	24,306,120	24,345,139	24,388,159
881001 Chief Executive Officer	429,612	434,569	450,912	451,340	451,767	452,195	452,622
881101 Public Affairs	934,223	978,840	1,137,821	1,163,695	1,213,625	1,215,763	1,217,901
883001 Chief Administrative Officer	712,746	782,808	838,655	960,898	1,204,848	1,206,345	1,207,842
883101 General Counsel	1,131,090	1,275,330	1,355,691	1,398,703	1,483,336	1,485,046	1,486,757
883201 Organizational Development Administration	524,843	618,089	640,727	657,768	691,100	692,169	693,238
883211 Organizational Development Talent Management	2,400,695	2,245,695	2,578,057	2,696,521	3,008,787	3,014,346	3,019,905
883231 Organizational Development Training	1,323,055	1,429,429	1,545,201	1,565,927	1,604,705	1,607,699	1,610,692
883401 Enterprise Risk Management and Safety	595,529	806,372	919,774	980,461	1,100,765	1,102,476	1,104,186
884001 Chief Financial Officer	614,678	753,804	1,163,558	1,165,054	1,166,551	1,168,048	1,169,544
884111 Financial Reporting & Accounting	3,107,832	3,117,397	3,183,646	3,260,638	3,409,872	3,415,431	3,424,990
884113 Financial Management & Planning	1,391,203	1,609,260	1,531,864	1,534,216	1,651,245	1,653,811	1,656,377
884121 Procurement Director	3,707,448	3,663,710	3,978,954	4,112,197	4,372,481	4,379,964	4,387,448
884131 Treasury	320,560	373,599	381,549	382,190	382,831	383,473	384,114
884141 CFO Services	1,774,221	2,124,599	2,223,327	2,315,522	2,564,203	2,568,373	2,572,542
Grand Total	120,702,095	130,002,350	138,684,239	146,796,654	159,755,201	160,361,548	160,651,088
Baseline - FY 2024 Actual	125,999,300						



FY 2026 - FY 2035 Ten Year Financial Plan Update as of January 2, 2025

Audit Committee Meeting
January 6, 2025

Importance of a Ten Year Plan

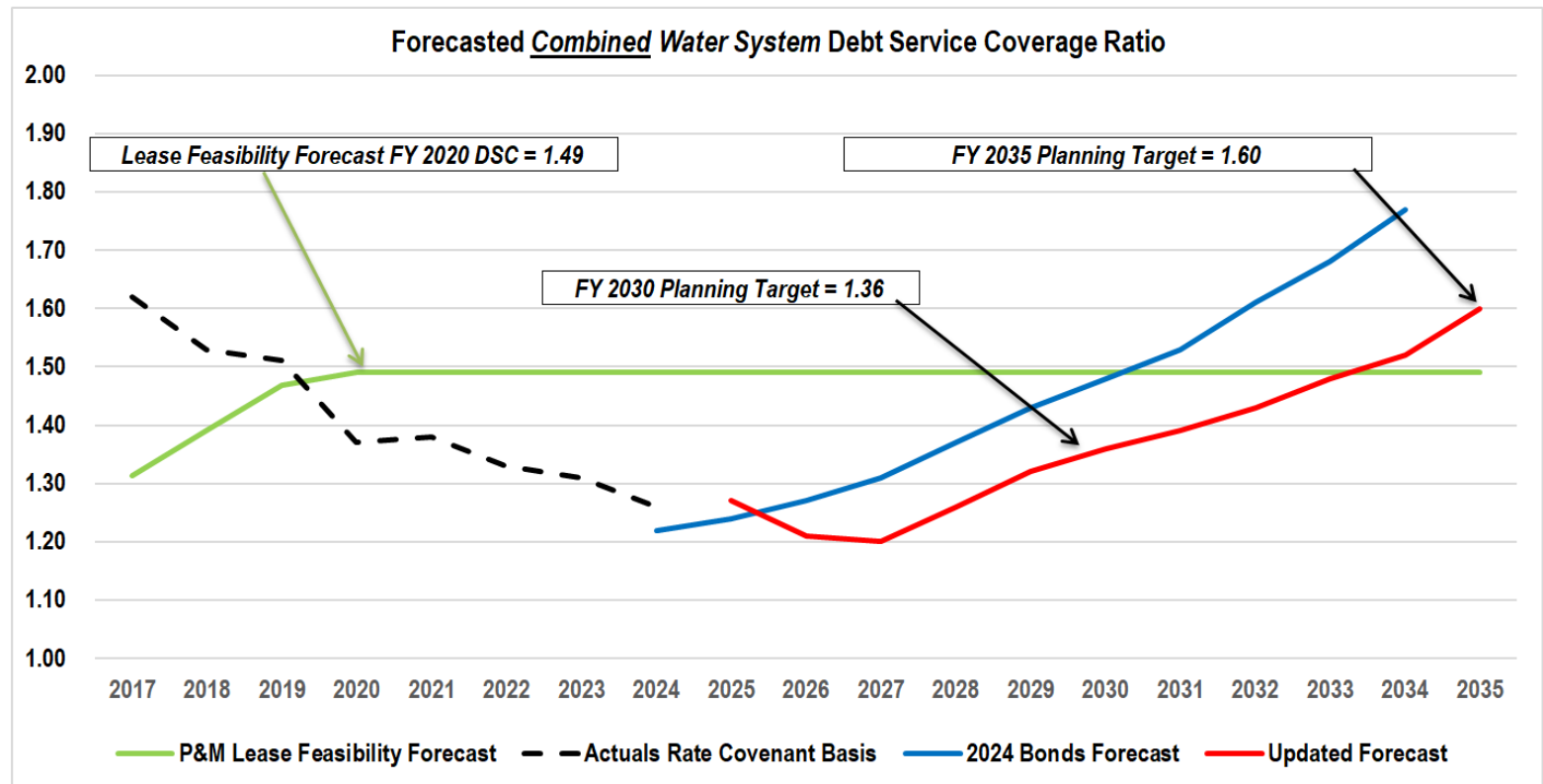
- ◆ Supports organizational resiliency by providing a roadmap to maintaining financial strength and acknowledging how decisions made today impact the future
- ◆ Smooths out impacts of peak financial needs of the capital improvement plan and fluctuating economic decisions
- ◆ Transparently communicates current and future needs– and how that impacts charges
- ◆ Provides a way to measure performance – was the plan achieved; and if not, why

Updates to the Financial Plan

- ◆ GLWA updates the financial plan regularly to stay aligned with other key financial decision points
 1. Annual budget and charges cycle
 2. Debt issuance
 3. Other events such as significant economic changes or capital decisions
- ◆ The plan is not created in a vacuum; internal cross-functional teams, external advisors, and key stakeholders provide input
- ◆ *Note: This ten year plan update provides a comparative analysis with the last plan update with the June 2024 bond forecast*

Water Preliminary Ten-Year Forecast

- The Debt Service Coverage (DSC) Ratio chart includes DWSD data which is pending updated information.
- This is the DSC ratio that rating agencies look at when assigning ratings.
- Debt Service Coverage as calculated as revenues less expenses divided by debt service. The higher the number, the greater the financial strength to repay debt.



Regional System Cumulative Avg Annual Budget Increase

Table data includes only the GLWA Regional System	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
If 4% Promise Was Fully Implemented	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Actual & Preliminary Updated Forecast	4.0%	1.5%	1.3%	1.6%	1.4%	1.3%	1.6%	1.9%	2.1%	2.7%	3.1%	3.5%	3.8%	3.9%	3.9%	3.9%	4.0%	4.0%	4.0%
Regional Actual Budget Adjustments	4.0%	-0.9%	1.0%	2.5%	0.6%	0.7%	3.5%	4.0%	4.0%										
Regional Forecasted Budget Adjustments										7.5%	7.5%	7.5%	7.5%	6.0%	4.0%	4.0%	5.0%	5.0%	4.0%
Regional Actual Charges Adjustments	4.5%	1.8%	1.8%	0.6%	3.2%	1.5%	3.7%	2.8%	3.3%										
Regional Forecasted Charges Adjustments										7.4%	7.7%	7.4%	7.3%	6.8%	4.3%	3.8%	5.1%	5.0%	4.5%
Regional Actual/Forecasted Days Cash	959	1,066	1,058	1,086	1,043	632	573	640	494	452	429	450	527	626	739	740	760	543	613
New Money Bonds needed (millions)									\$ 300	\$ 350	\$ -	\$ 350	\$ -	\$ 200	\$ -	\$ 200	\$ -	\$ 150	\$ -
Capital Projects Spend Forecast (millions)									\$ 210	\$ 185	\$ 235	\$ 290	\$ 220	\$ 145	\$ 155	\$ 190	\$ 275	\$ 265	\$ 240



Water Preliminary Ten-year Forecast

GLWA Regional Water System

	Adopted 2025	Forecasted										
		2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Revenues												
Revenue from Charges												
1 Wholesale Charges	\$ 347,758,000	\$ 347,758,000	\$ 371,898,700	\$ 398,806,200	\$ 426,954,800	\$ 456,619,300	\$ 486,327,500	\$ 506,135,500	\$ 524,573,300	\$ 550,028,900	\$ 576,556,500	\$ 601,327,200
2 Local System Charges	27,094,800	27,094,800	30,622,600	34,554,700	38,668,200	43,003,200	47,344,600	50,239,200	52,933,600	56,653,600	60,530,200	64,150,100
3 Total Revenue from Water Charges	374,852,800	374,852,800	402,521,300	433,360,900	465,623,000	499,622,500	533,672,100	556,374,700	577,506,900	606,682,500	637,086,700	665,477,300
Investment Earnings												
4 Unrestricted	6,692,200	10,181,800	7,884,400	7,872,900	8,430,200	9,643,800	7,678,400	7,360,800	8,784,200	8,966,000	9,374,000	6,940,600
5 Restricted	3,182,100	3,325,100	3,302,100	3,523,600	4,081,100	4,743,300	3,530,200	2,972,000	3,111,400	3,255,900	3,421,700	3,504,600
6 Total Investment Earnings	9,874,300	13,506,900	11,186,500	11,396,500	12,511,300	14,387,100	11,208,600	10,332,800	11,895,600	12,221,900	12,795,700	10,445,200
7 Other Operating Revenue	400,000	400,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000
8 Total Revenues	385,127,100	388,759,700	414,007,800	445,057,400	478,434,300	514,309,600	545,180,700	567,007,500	589,702,500	619,204,400	650,182,400	676,222,500
Revenue Requirements												
9 Operations & Maintenance Expense	169,625,000	169,625,000	182,456,000	193,475,700	198,159,400	199,052,300	203,480,900	207,550,500	211,701,500	215,935,500	220,254,200	224,659,300
10 Debt Service - Regional System	175,300,800	165,476,100	185,983,000	203,033,000	213,374,400	226,385,500	237,042,700	244,543,200	249,621,300	257,002,300	265,002,300	263,821,000
11 General Retirement System Pension	2,283,300	1,653,300	1,622,200	1,450,400	1,306,700	1,275,600	1,824,100	1,793,000	1,761,900	1,730,700	1,699,600	1,546,900
Water Residential Assistance												
12 Program Contribution	1,947,800	1,876,500	2,004,100	2,157,500	2,318,000	2,487,200	2,656,600	2,769,500	2,874,700	3,019,800	3,171,100	3,312,300
Extraordinary Repair &												
13 Replacement Deposit	0	0	1,244,500	892,200	0	0	0	0	0	0	18,600	120,000
14 Regional System Lease	22,500,000	22,500,000	22,500,000	22,500,000	22,500,000	22,500,000	22,500,000	22,500,000	22,500,000	22,500,000	22,500,000	22,500,000
15 Working Capital Requirement	6,200,000	12,000,000	1,600,000	1,100,000	1,400,000	5,100,000	4,400,000	3,300,000	2,900,000	3,400,000	3,500,000	2,000,000
Improvement & Extension Fund												
16 Transfer Pending	7,270,200	15,628,800	16,598,000	20,448,600	39,375,800	57,509,000	73,276,400	84,551,300	98,343,100	115,616,100	134,036,600	158,263,000
17 Total Revenue Requirements	385,127,100	388,759,700	414,007,800	445,057,400	478,434,300	514,309,600	545,180,700	567,007,500	589,702,500	619,204,400	650,182,400	676,222,500
Debt Service Coverage Projections - Rate Covenant Basis (Regional Water System)												
18 All Bonds, including SRF	1.23	1.32	1.25	1.24	1.31	1.39	1.44	1.47	1.51	1.57	1.62	1.71

Current Water Forecast vs. 2024 Bonds Feasibility Study

- ◆ No change to Total Budget Increase percentage
- ◆ Total Revenues variance due to 2024 bond forecast using forecasted 2025 as base
- ◆ O&M expenses higher
- ◆ Debt Service increased due to increased need of bond funds for CIP

	Water Forecast					5 Year Total 2026 - 2030
	2026	2027	2028	2029	2030	
<u>Total Budget Increase</u>						
2024 Bonds Forecast	7.5%	7.5%	7.5%	7.5%	6.0%	
January 2025 Update	7.5%	7.5%	7.5%	7.5%	6.0%	
<u>Total Revenues</u>						
2024 Bonds Forecast	\$ 415,301,600	\$ 446,449,200	\$ 479,932,900	\$ 515,927,900	\$ 546,883,600	\$ 2,404,495,200
January 2025 Update	\$ 414,007,800	\$ 445,057,400	\$ 478,434,300	\$ 514,309,600	\$ 545,180,700	\$ 2,396,989,800
<u>Regional Operations & Maintenance Expense</u>						
2024 Bonds Forecast	\$ 179,410,000	\$ 182,938,200	\$ 186,537,000	\$ 190,207,700	\$ 194,011,900	\$ 933,104,800
January 2025 Update	\$ 182,456,000	\$ 193,475,700	\$ 198,159,400	\$ 199,052,300	\$ 203,480,900	\$ 976,624,300
<u>Debt Service - Regional System</u>						
2024 Bonds Forecast	\$ 179,870,500	\$ 193,005,600	\$ 203,579,000	\$ 215,660,500	\$ 224,799,700	\$ 1,016,915,300
January 2025 Update	\$ 185,983,000	\$ 203,033,000	\$ 213,374,400	\$ 226,385,500	\$ 237,042,700	\$ 1,065,818,600
<u>Improvement & Extension Fund Transfer Pending</u>						
2024 Bonds Forecast	\$ 25,492,400	\$ 40,892,800	\$ 60,380,500	\$ 80,274,500	\$ 97,463,100	\$ 304,503,300
January 2025 Update	\$ 16,598,000	\$ 20,448,600	\$ 39,375,800	\$ 57,509,000	\$ 73,276,400	\$ 207,207,800

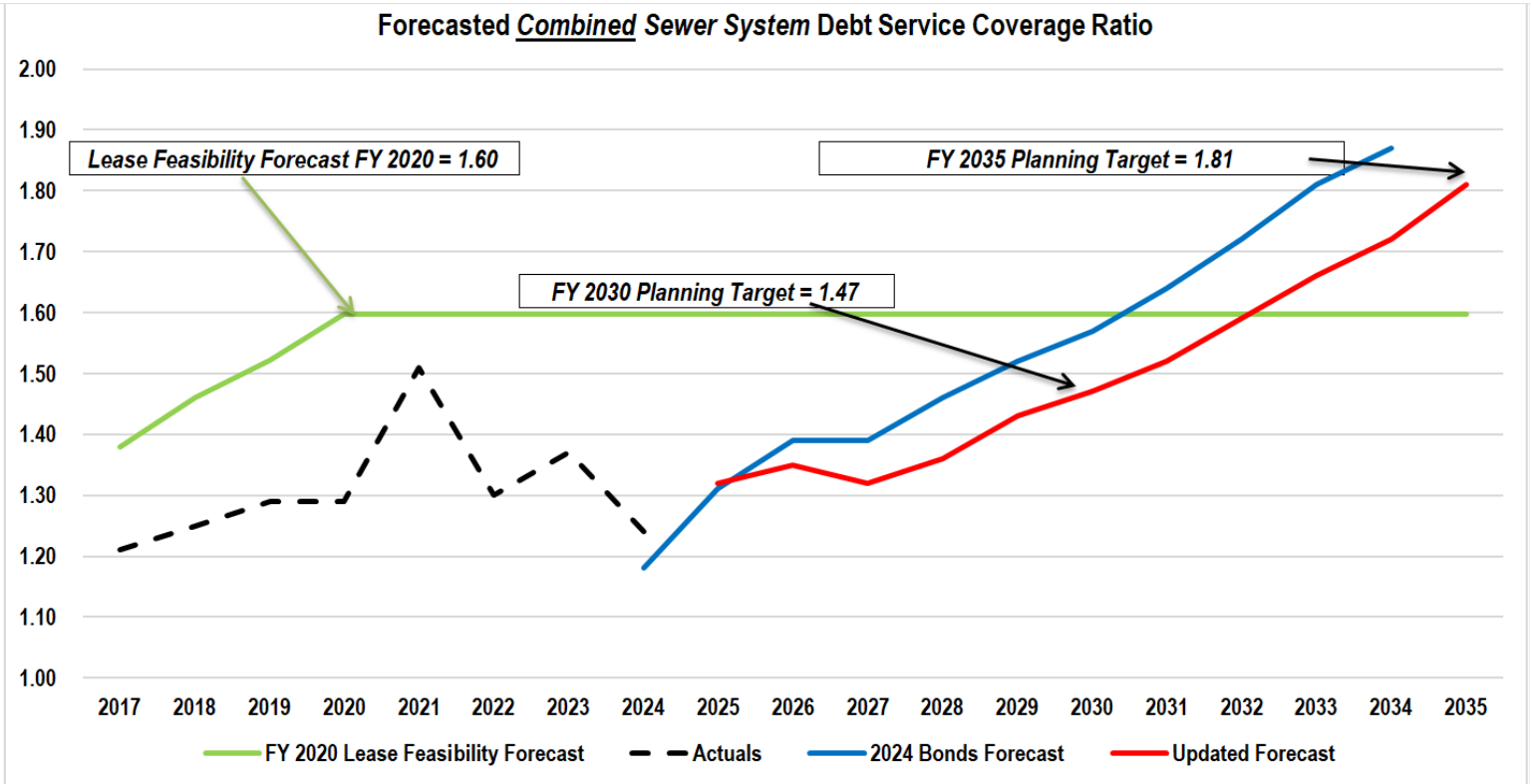
Water CIP and Financing Comparison

- The CIP timing has changed requiring funding sooner in the current update.
- Due to decreased availability of I&E funds, the current forecast requires more debt financing.
- Timing of bond issues are near end of fiscal year versus beginning of fiscal year

	Water Forecast					5 Year Total 2026 - 2030
	2026	2027	2028	2029	2030	
Capital Improvement Plan						
2024 Bonds Forecast	\$ 210,000,000	\$ 230,000,000	\$ 240,000,000	\$ 195,000,000	\$ 205,000,000	\$ 1,080,000,000
January 2025 Update	\$ 183,064,200	\$ 233,120,400	\$ 285,941,600	\$ 230,461,200	\$ 150,641,700	\$ 1,083,229,100
Capital Spend Ratio						
2024 Bonds Forecast	100%	100%	100%	100%	100%	
January 2025 Update	100%	100%	100%	95%	95%	
Capital Improvement Financing Plan						
2024 Bonds Forecast	\$ 210,000,000	\$ 230,000,000	\$ 240,000,000	\$ 195,000,000	\$ 205,000,000	\$ 1,080,000,000
January 2025 Update	\$ 185,000,000	\$ 235,000,000	\$ 290,000,000	\$ 220,000,000	\$ 145,000,000	\$ 1,075,000,000
New Bond funding						
2024 Bonds Forecast	\$ -	\$ 395,000,000	\$ -	\$ 250,000,000	\$ -	\$ 645,000,000
January 2025 Update	\$ 350,000,000	\$ -	\$ 350,000,000	\$ -	\$ 200,000,000	\$ 900,000,000
Use of I&E funds for CIP						
2024 Bonds Forecast	\$ 8,000,000	\$ 18,000,000	\$ 50,500,000	\$ 58,250,000	\$ 88,750,000	\$ 223,500,000
January 2025 Update	\$ 9,250,000	\$ 11,750,000	\$ 14,500,000	\$ 11,000,000	\$ 7,250,000	\$ 53,750,000

Sewer Preliminary Ten-year Forecast

- ◆ The Debt Service Coverage (DSC) Ratio chart includes DWSD data which is pending updated information.
- ◆ This is the DSC ratio that rating agencies look at when assigning ratings.
- ◆ Debt Service Coverage as calculated as revenues less expenses divided by debt service. The higher the number, the greater the financial strength to repay debt.



Regional System Cumulative Avg Annual Budget Increase

Table data includes only the GLWA Regional System

If 4% Promise Was Fully Implemented	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Actual & Preliminary Updated Forecast	4.0%	2.1%	1.8%	1.9%	1.8%	1.1%	1.1%	1.5%	1.7%	2.1%	2.4%	2.7%	2.9%	3.0%	3.0%	3.1%	3.1%	3.2%	3.2%	3.2%	3.2%
Regional Actual Budget Adjustments	4.0%	0.3%	1.0%	2.2%	1.3%	-2.3%	1.3%	4.0%	4.0%												
Regional Forecasted Budget Adjustments										5.5%	5.5%	5.5%	5.5%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Regional Actual Charges Adjustments	8.3%	-0.7%	0.1%	0.8%	2.0%	0.6%	2.4%	2.8%	3.0%												
Regional Forecasted Charges Adjustments										5.7%	5.4%	5.3%	5.9%	4.7%	4.5%	3.8%	4.1%	3.9%	4.0%	4.0%	4.0%
Regional Actual/Forecasted Days Cash	495	432	495	593	664	574	521	571	528	542	560	432	506	483	582	569	636	636	612	612	612
New Money Bonds needed (millions)										\$ 50	\$ 150	\$ -	\$ 150	\$ -	\$ 100	\$ -	\$ 50	\$ -	\$ -	\$ -	\$ -
Capital Projects Spend Forecast (millions)										\$ 170	\$ 175	\$ 235	\$ 285	\$ 255	\$ 190	\$ 160	\$ 140	\$ 140	\$ 165	\$ 210	\$ 210



Sewer Preliminary Ten-year Forecast

GLWA Regional Sewer System

	Adopted 2025	Forecasted										
		2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Revenues												
Revenue from charges												
1 Wholesale Charges	287,517,600	287,517,600	301,556,600	317,570,900	334,037,700	353,369,400	369,590,100	385,937,700	400,445,900	416,491,000	432,465,900	449,705,400
2 Local System Charges	205,924,800	205,924,800	217,909,900	229,996,100	242,423,900	257,013,700	269,255,700	281,593,500	292,543,000	304,652,500	316,709,100	329,719,900
3 Industrial Waste Charges	8,719,300	8,719,300	9,213,500	9,711,900	10,224,400	10,826,000	11,330,800	11,839,600	12,291,100	12,790,500	13,287,700	13,824,200
4 Pollutant Surcharges	5,434,400	5,434,400	5,742,400	6,053,000	6,372,400	6,747,400	7,062,000	7,379,100	7,660,500	7,971,700	8,281,600	8,616,000
Total Revenue from												
5 Sewer Charges	507,596,100	507,596,100	534,422,400	563,331,900	593,058,400	627,956,500	657,238,600	686,749,900	712,940,500	741,905,700	770,744,300	801,865,500
Investment Earnings												
6 Unrestricted	10,494,500	10,807,600	10,331,200	11,369,800	13,000,800	11,206,600	9,200,000	7,185,500	8,823,100	8,805,900	10,035,000	10,237,700
7 Restricted	1,861,500	4,254,100	4,081,400	4,338,300	4,840,400	5,359,000	3,901,200	3,271,400	3,379,700	3,488,800	3,637,500	3,741,000
8 Total Investment Earnings	12,356,000	15,061,700	14,412,600	15,708,100	17,841,200	16,565,600	13,101,200	10,456,900	12,202,800	12,294,700	13,672,500	13,978,700
6 Other Operating Revenue	700,000	700,000	450,000	450,000	450,000	450,000	450,000	450,000	450,000	450,000	450,000	450,000
9 Total Revenues	520,652,100	523,357,800	549,285,000	579,490,000	611,349,600	644,972,100	670,789,800	697,656,800	725,593,300	754,650,400	784,866,800	816,294,200
Revenue Requirements												
10 Operations & Maintenance Expense	228,934,000	228,934,000	242,124,500	250,889,700	260,768,400	265,690,500	271,475,300	276,904,800	282,442,900	288,091,800	293,853,600	299,730,700
11 Debt Service - Regional System	226,279,400	219,057,100	222,402,500	243,463,300	249,692,500	255,714,600	260,026,100	264,429,500	266,425,600	268,161,400	273,187,500	272,547,000
12 General Retirement System Pension	4,846,300	3,718,800	3,648,800	3,262,300	2,939,200	2,869,200	3,836,500	3,766,600	3,696,600	3,626,600	3,556,600	3,340,400
Water Residential Assistance												
13 Program Contribution	2,651,700	2,541,500	2,661,100	2,804,900	2,952,800	3,126,400	3,272,100	3,418,900	3,549,200	3,693,300	3,836,800	3,991,600
Extraordinary Repair &												
14 Replacement Deposit	0	0	364,900	0	0	0	0	0	0	695,900	0	0
15 Regional System Lease	27,500,000	27,500,000	27,500,000	27,500,000	27,500,000	27,500,000	27,500,000	27,500,000	27,500,000	27,500,000	27,500,000	27,500,000
16 Working Capital Requirement	2,300,000	0	0	3,100,000	5,500,000	5,600,000	4,200,000	3,600,000	3,300,000	3,200,000	3,900,000	2,900,000
Improvement & Extension Fund												
17 Transfer Pending	28,140,700	41,606,400	50,583,200	48,469,800	61,996,700	84,471,400	100,479,800	118,037,000	138,679,000	159,681,400	179,032,300	206,284,500
18 Total Revenue Requirements	520,652,100	523,357,800	549,285,000	579,490,000	611,349,600	644,972,100	670,789,800	697,656,800	725,593,300	754,650,400	784,866,800	816,294,200
Debt Service Coverage Projections - Rate Covenant Basis (Regional Sewer System)												
19 All Bonds, including SRF	1.29	1.34	1.38	1.35	1.40	1.48	1.54	1.59	1.66	1.74	1.80	1.90

Current Sewer Forecast vs. 2024 Bonds Feasibility Study

- ◆ No change to Total Budget Increase percentage
- ◆ Total Revenues variance due to 2024 bond forecast using forecasted 2025 as base
- ◆ O&M expenses higher
- ◆ Debt Service increased due to increased need of bond funds for CIP

	Sewer Forecast					5 Year Total 2026 - 2030
	2026	2027	2028	2029	2030	
<u>Total Budget Increase</u>						
2024 Bonds Forecast	5.5%	5.5%	5.5%	5.5%	4.0%	
January 2025 Update	5.5%	5.5%	5.5%	5.5%	4.0%	
<u>Total Revenues</u>						
2024 Bonds Forecast	\$ 550,343,000	\$ 580,611,900	\$ 612,545,600	\$ 646,235,600	\$ 672,085,000	\$ 3,061,821,100
January 2025 Update	\$ 549,285,000	\$ 579,490,000	\$ 611,349,600	\$ 644,972,100	\$ 670,789,800	\$ 3,055,886,500
<u>Regional Operations & Maintenance Expense</u>						
2024 Bonds Forecast	\$ 240,591,400	\$ 245,353,200	\$ 250,210,300	\$ 255,164,500	\$ 260,267,800	\$ 1,251,587,200
January 2025 Update	\$ 242,124,500	\$ 250,889,700	\$ 260,768,400	\$ 265,690,500	\$ 271,475,300	\$ 1,290,948,400
<u>Debt Service - Regional System</u>						
2024 Bonds Forecast	\$ 217,757,300	\$ 235,915,300	\$ 240,337,300	\$ 247,530,900	\$ 250,051,100	\$ 1,191,591,900
January 2025 Update	\$ 222,402,500	\$ 243,463,300	\$ 249,692,500	\$ 255,714,600	\$ 260,026,100	\$ 1,231,299,000
<u>Improvement & Extension</u>						
<u>Fund Transfer Pending</u>						
2024 Bonds Forecast	\$ 56,066,300	\$ 61,950,500	\$ 87,068,600	\$ 108,212,300	\$ 125,779,000	\$ 439,076,700
January 2025 Update	\$ 50,583,200	\$ 48,469,800	\$ 61,996,700	\$ 84,471,400	\$ 100,479,800	\$ 346,000,900

Sewer CIP and Financing Comparison

- The CIP timing has changed requiring funding sooner in the current update
- Sewer CIP has increased
- Due to decreased availability of I&E funds, the current forecast requires more debt financing.
- Timing of bond issues are near end of fiscal year versus beginning of fiscal year

	Sewer Forecast					5 Year Total 2026 - 2030
	2026	2027	2028	2029	2030	
<u>Capital Improvement Plan</u>						
2024 Bonds Forecast	\$ 210,000,000	\$ 230,000,000	\$ 240,000,000	\$ 195,000,000	\$ 205,000,000	\$ 1,080,000,000
January 2025 Update	\$ 193,221,300	\$ 291,841,400	\$ 337,799,600	\$ 261,115,500	\$ 187,625,500	\$ 1,271,603,300
<u>Capital Spend Ratio</u>						
2024 Bonds Forecast	100%	100%	100%	100%	100%	
January 2025 Update	90%	80%	84%	96%	100%	
<u>Capital Improvement Financing Plan</u>						
2024 Bonds Forecast	\$ 200,000,000	\$ 205,000,000	\$ 195,000,000	\$ 185,000,000	\$ 195,000,000	\$ 980,000,000
January 2025 Update	\$ 175,000,000	\$ 235,000,000	\$ 285,000,000	\$ 255,000,000	\$ 190,000,000	\$ 1,140,000,000
<u>New Bond funding</u>						
2024 Bonds Forecast	\$ -	\$ 105,000,000	\$ -	\$ 100,000,000	\$ -	\$ 205,000,000
January 2025 Update	\$ 150,000,000	\$ -	\$ 150,000,000	\$ -	\$ 100,000,000	\$ 400,000,000
<u>Use of I&E funds for CIP</u>						
2024 Bonds Forecast	\$ 23,500,000	\$ 33,500,000	\$ 71,000,000	\$ 78,000,000	\$ 113,500,000	\$ 319,500,000
January 2025 Update	\$ 8,750,000	\$ 11,750,000	\$ 127,744,500	\$ 21,805,000	\$ 104,843,400	\$ 274,892,900

Key Metrics Comparison

- Days Cash for water is lower through 2029 due to higher O&M expenses.
- Days Cash for sewer is higher for 2026 & 2027 which is based on a higher I&E transfer in 2025 which may not materialize as data is not available at this time to accurately forecast the 2025 transfer.
- Debt Service Coverage (DSC) is lower due to higher O&M and debt service.

	Water Forecast				
	2026	2027	2028	2029	2030

Days Cash

2024 Bonds Forecast	500	525	525	550	550
January 2025 Update	452	429	450	527	626

DSC-GLWA only

2024 Bonds Forecast	1.31	1.37	1.44	1.51	1.57
January 2025 Update	1.25	1.24	1.31	1.39	1.44

	Sewer Forecast				
	2026	2027	2028	2029	2030

Days Cash

2024 Bonds Forecast	500	525	525	550	550
January 2025 Update	542	560	432	506	483

DSC-GLWA only

2024 Bonds Forecast	1.42	1.42	1.51	1.58	1.65
January 2025 Update	1.38	1.35	1.40	1.48	1.54

Historical Average System Charge Adjustments

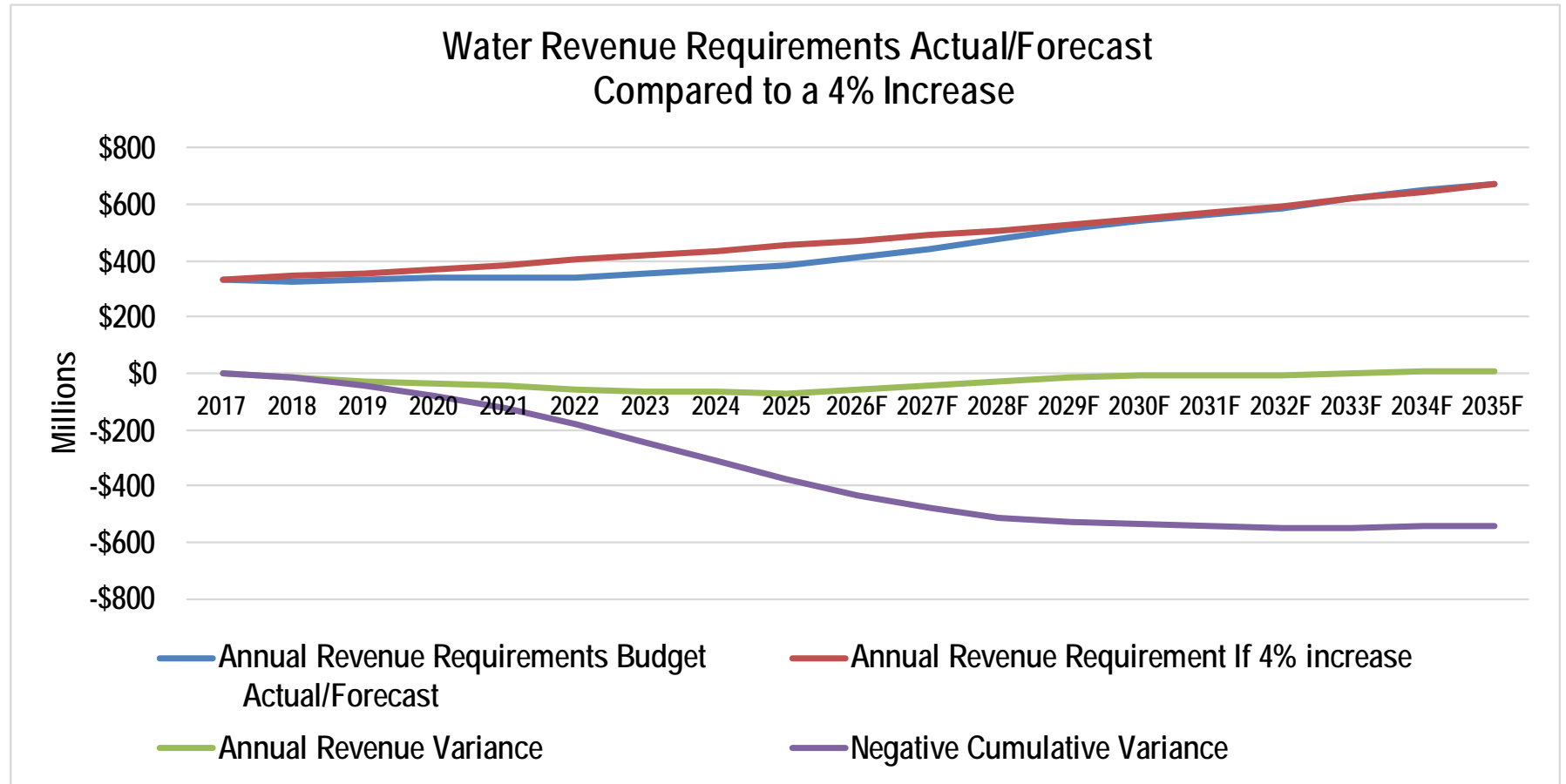
- GLWA's charge adjustments through 2025 have lagged behind inflation.
- GLWA has had significant cost increases in utilities and chemicals since 2022.
- A tight labor market and regional economy resulted in increased personnel costs in 2024 and 2025 to attract and retain team members.
- The bond refundings have significantly helped in keeping charges lower.
- Investment earnings offset increasing O&M expenses in 2023 and 2024. Charge increases will need to offset the reduction of investment income in 2026 due to changing market conditions.

Average System Charge Adjustment		
Year	Water	Sewer
2018	1.8%	-0.7%
2019	1.8%	0.1%
2020	0.6%	0.8%
2021	3.2%	2.0%
2022	1.5%	-0.6%
2023	3.7%	2.4%
2024	2.75%	2.75%
2025	3.25%	3.0%
2026 Proposed	7.4%	5.7%
9-Year Average	2.9%	1.2%

Available Annual CPI Data	
Year	CPI
2018	2.4%
2019	1.8%
2020	1.2%
2021	4.7%
2022	8.0%
2023	4.1%
Average	3.7%

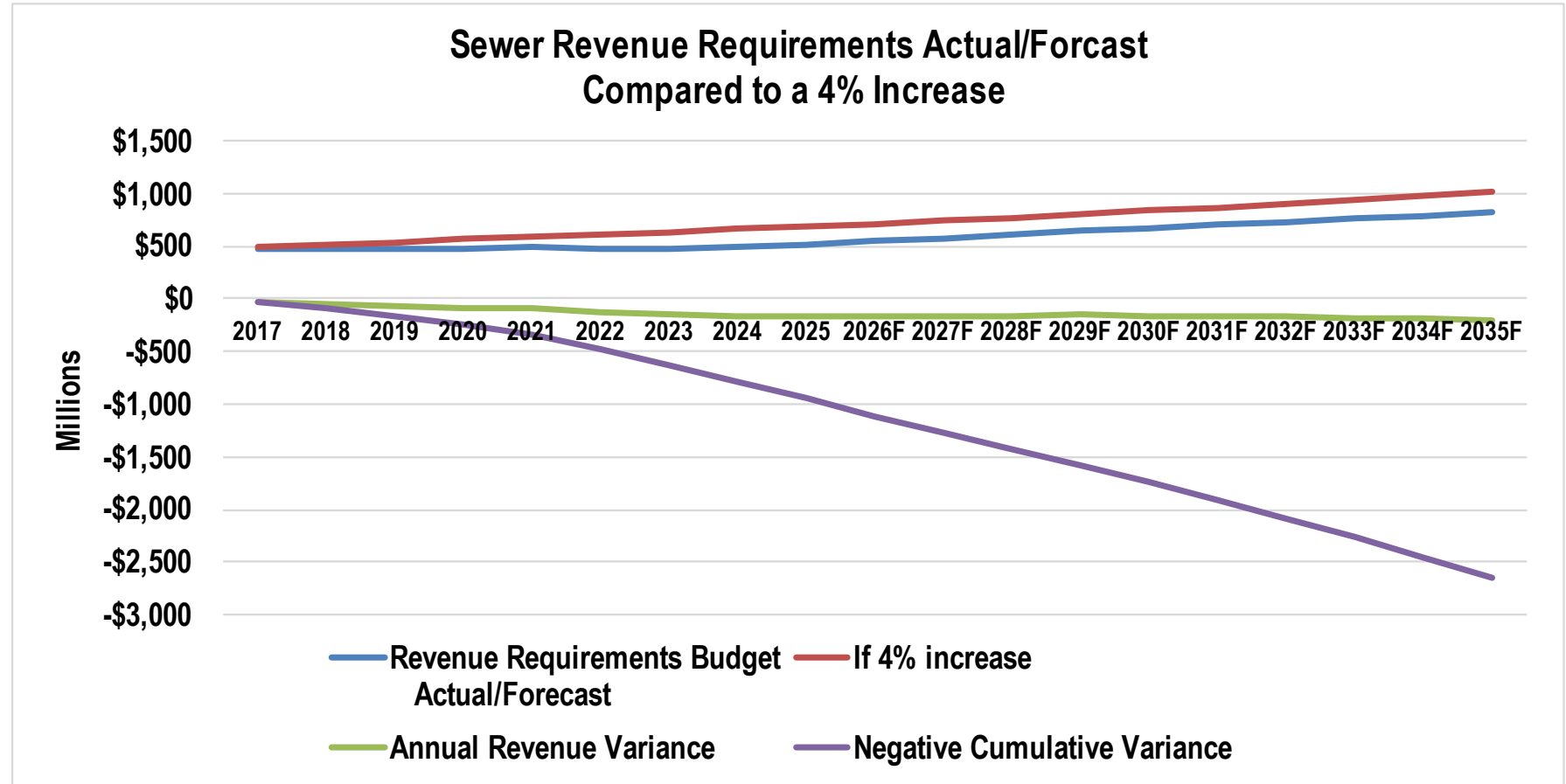
Cumulative Effect of Charge Increases Water

- The feasibility study supporting a regional authority performed by Plante & Moran used a 4% annual revenue increase.
- The cumulative effect of annual increases less than 4% means it will take longer to achieve initial expectations by nearly \$600 million.
- This result is lower debt service coverage ratio than the feasibility study projected.

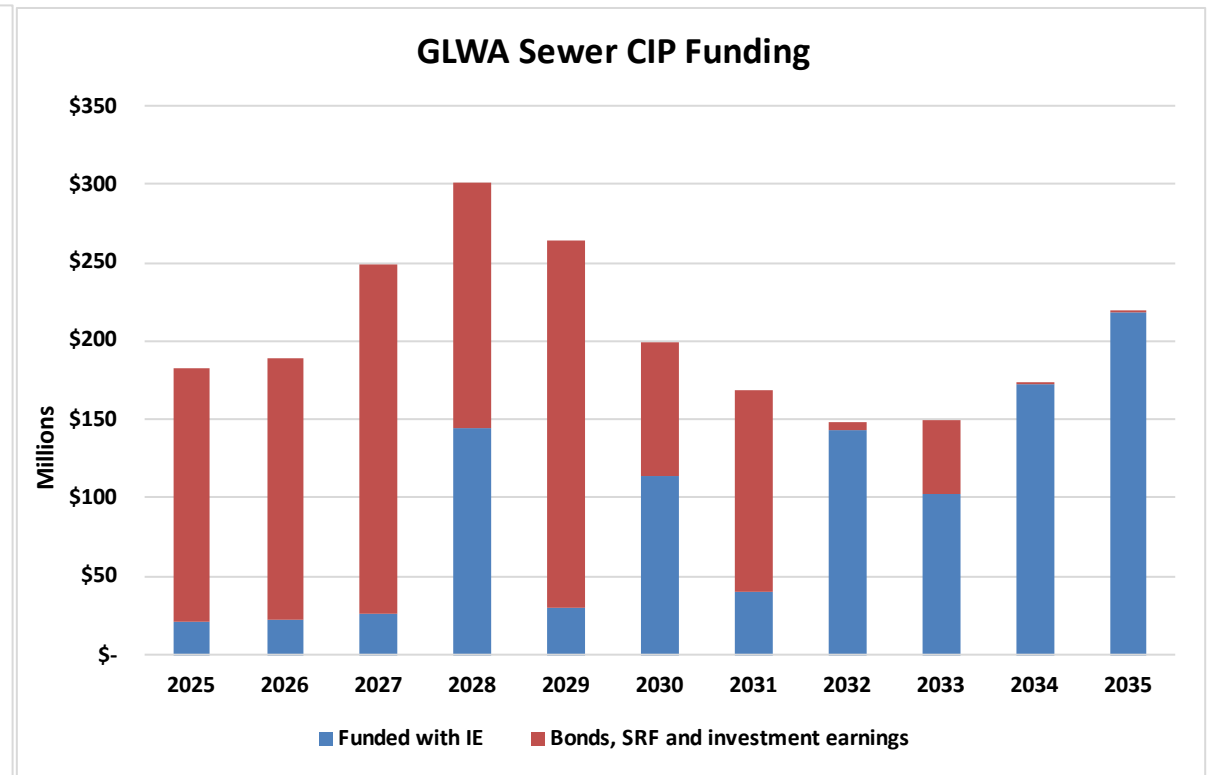
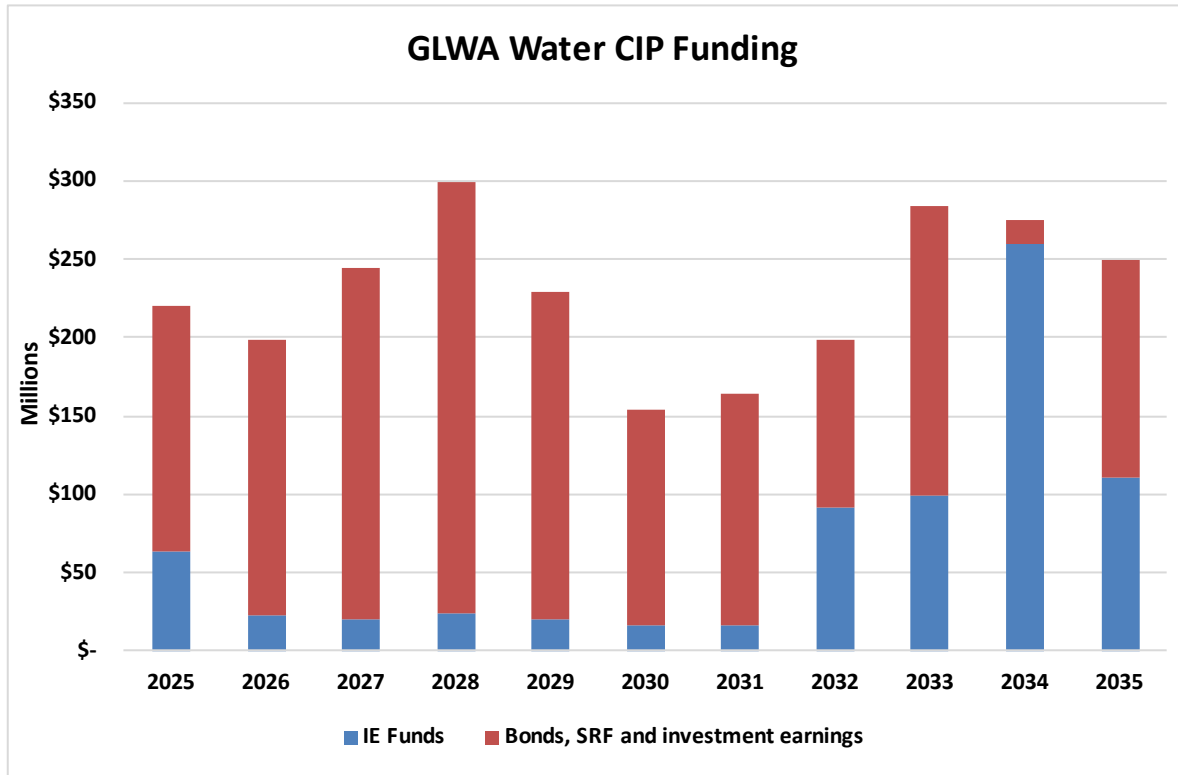


Cumulative Effect of Charge Increases Sewer

- The feasibility study supporting a regional authority performed by Plante & Moran used a 4% annual revenue increase.
- The cumulative effect of annual increases less than 4% means it will take longer to achieve initial expectations by nearly \$2.5 billion.
- This result is lower debt service coverage ratio than the feasibility study projected.

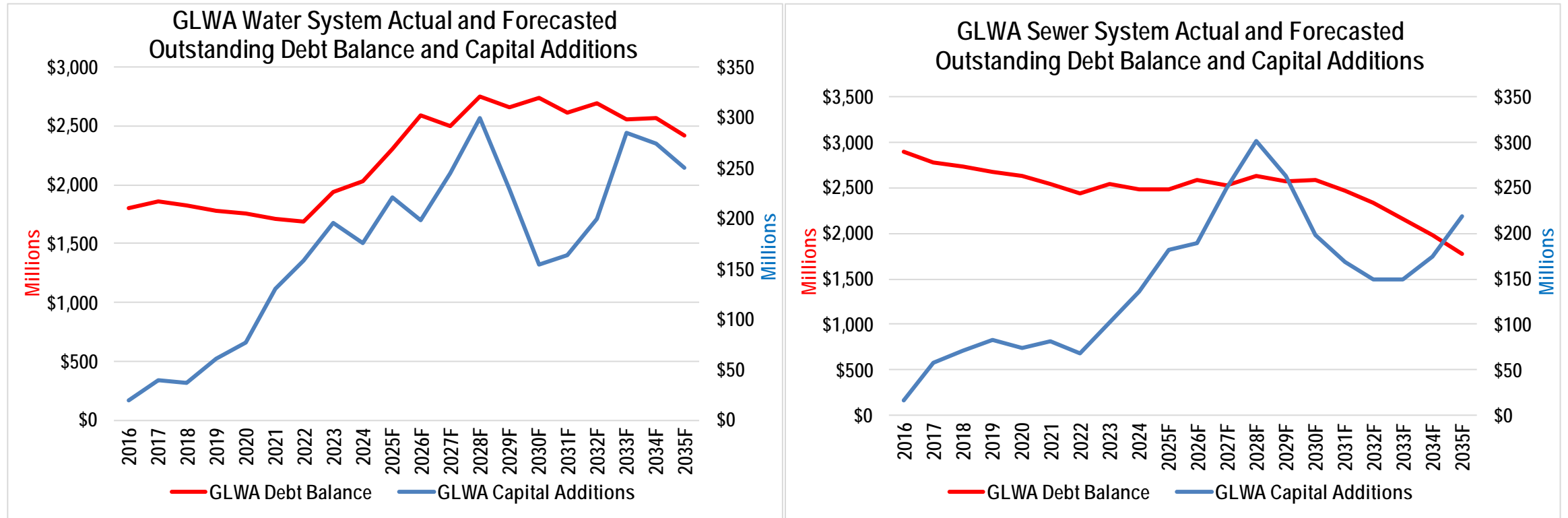


Preliminary CIP Funding Forecast



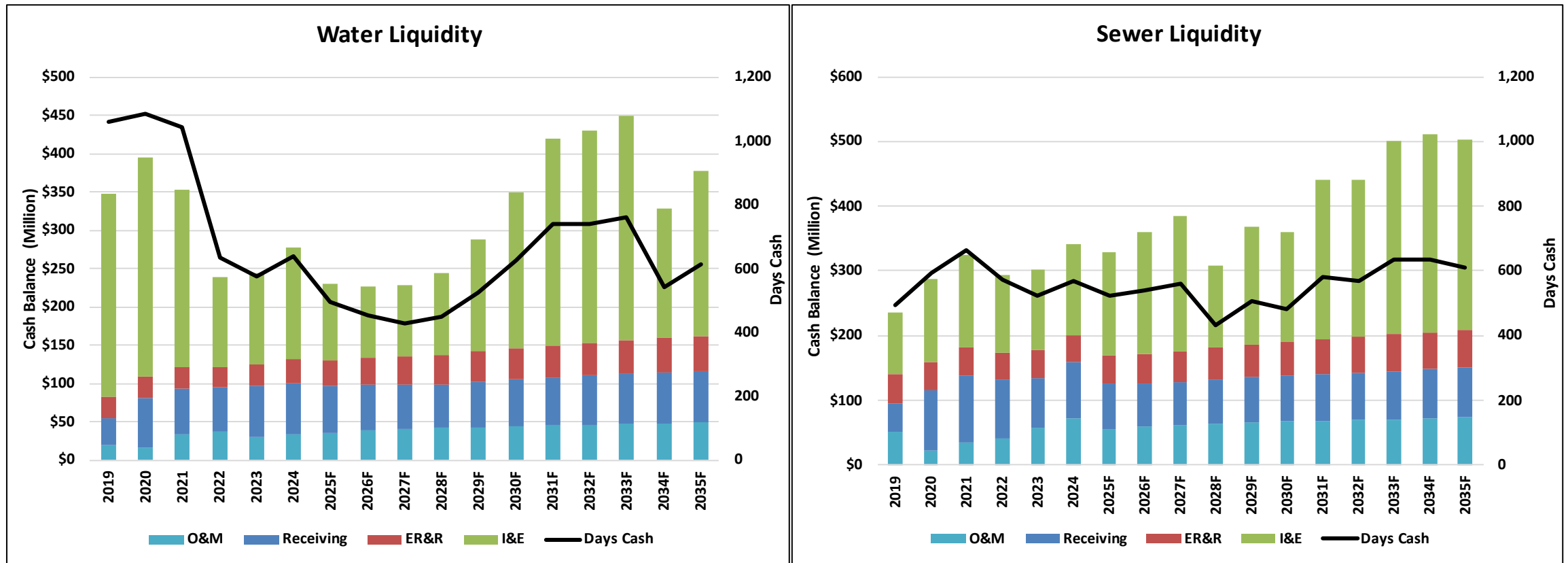
This funding forecast assumes that the revenue requirement increases in the current ten-year plan will be approved. Any variance from those increases will affect future CIP funding.

Historical and *Preliminary* Forecast Capital Additions and Outstanding Debt



This chart assumes that the revenue requirement increases in the current ten-year plan will be approved. Any variance from those increases will affect the amount of future bond funding needed and could result in increased debt.

Liquidity Historical and *Preliminary* Forecast



This chart assumes that the revenue requirement increases in the current ten-year plan will be approved. Any variance from those increases will affect the amount of I&E funds available and the days cash calculation.



Budget & Charges Briefing

GLWA Board of Directors
October 9, 2024

Key Takeaways

1. Review timeline for budget and charges season
2. Economic outlook: moderate adjustments after era of historic increases
3. No new charges methodology impacts this year; declining water demand is under watch
4. Achievements in controlling budget and charges
5. Areas of focus – commodities, capital, and financing
6. Operations Report: Managing reliability at the water resource recovery facility and the tension between operating and capital spending
7. The ten-year financial plan forecast provides a roadmap to better understand and prepare for future challenges



Section 1 – Budget & Charges Timeline

Overall Budget & Charges Timing

- Tuesday, September 10, 2024 – Capital Planning Committee –CIP Spend Update
- Monday, September 30, 2024 – Internal Deadline for Operations & Maintenance Cost Center Budget Request
- **Wednesday, October 9, 2024 – Board of Directors Workshop Meeting**
 - **Economic Outlook Task Force Update**
 - **Budget and Charges Briefing**
- Tuesday, October 15, 2024 – Capital Planning Committee – CIP Version 1.0
- **Thursday, October 17, 2024 - Charges Rollout #1 – CIP Version 1.0**
- **Tuesday, November 12, 2024 - Charges Rollout #2 - Units of Service**
- Thursday, November 30, 2023 – Pencils Down to Compile Proposed Materials
- Tuesday, December 10, 2024 – Capital Planning Committee – CIP Version 2.0
- Friday, December 20, 2024 – Audit Committee - Proposed Budget and Charges Strategy

Overall Budget & Charges Timing

- **Thursday, January 9, 2025 – Charges Rollout #3 – Proposed Charges and Introduction of Proposed Budget**
- Monday, January 13, 2025 through Wednesday, January 15, 2025 – Member Partner One-on-One Meetings
- **Thursday, January 16, 2025 – Charges Rollout #4 – Feedback on Charges and Further Review of Proposed Budget**
- Wednesday, January 22, 2025 (Tentative) – Board Meeting Presentations
 - Proposed FY 2026 and 2027 Biennial Budget (Revenue Requirement) and Five-Year Financial Plan
 - Proposed FY 2026 Charges
 - Proposed FY 2026-2030 Capital Improvement Plan Presentation

Overall Budget & Charges Timing

- Wednesday, February 26, 2025 (Tentative) – Board Meeting
 - Public Hearing FY 2026 & FY 2027 Biennial Budget
 - Public Hearing FY 2026 Schedule of Revenues and Charges
 - Proposed Adoption of FY 2026 & FY 2027 Biennial Budget (subject to public comment)
 - Proposed Approval of the FY 2026 Schedule of Revenues and Charges (subject to public comment)
 - Proposed Approval of FY 2026–2030 Capital Improvement Plan
- Monday, July 1, 2025 – Effective date of budget, charges, and capital plan



Section 2 – Economic Outlook



Section 3 – Charges Updates

New Charges Consultant – Willdan Financial Services



Jeff McGarvey
Vice President &
Managing Principal



Kevin Burnett
Principal Consultant

Not pictured: Michael Cronan, Lead Project Analyst



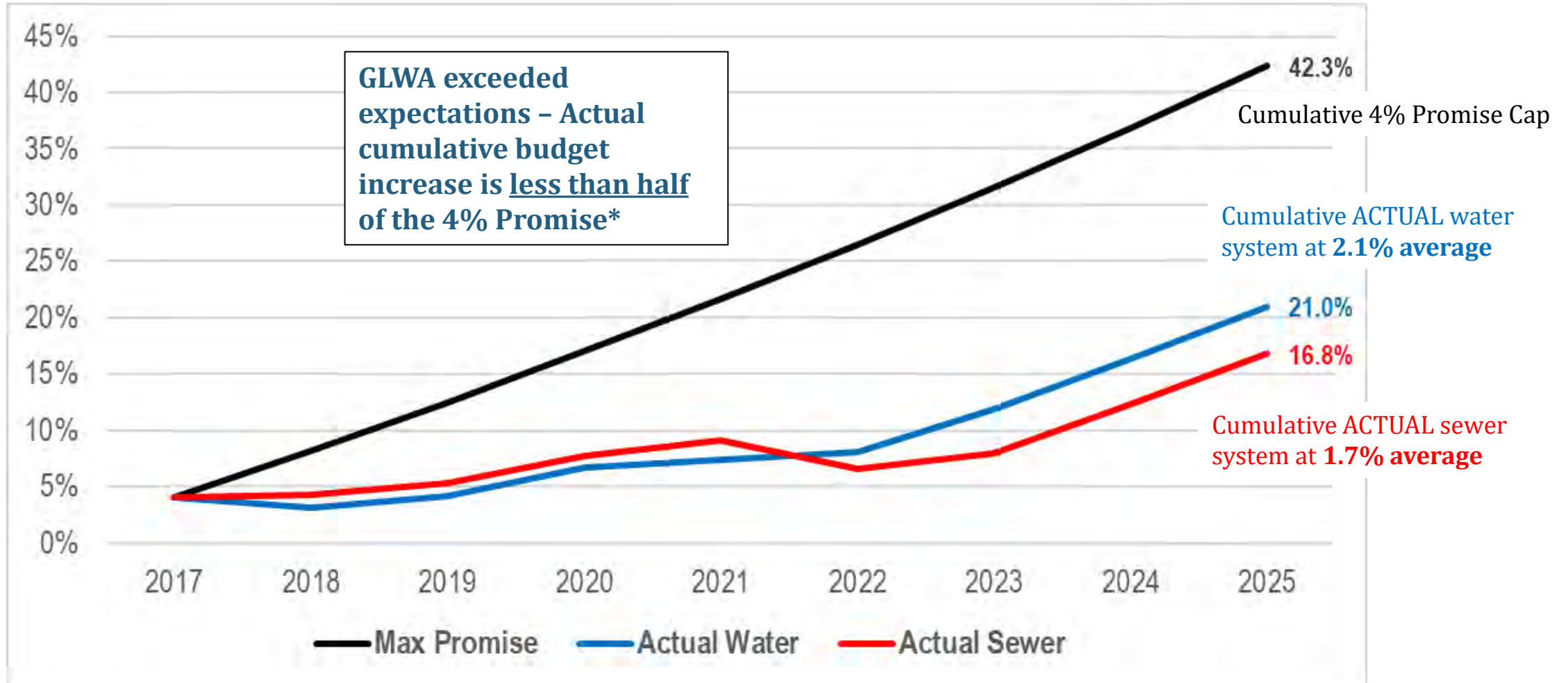
Jason Gray
Vice President &
Managing Principal

- ✓ Selected by a panel of GLWA team members and Member Partners
- ✓ Actively engaged in ramp-up with the Charges Outreach & Modeling Team (Matt Lane and Guy Belew) and transition of extensive modeling and historical information with retiring Bart Foster, The Foster Group
- ✓ Willdan is the lead for the FY 2026 Cost of Service Study
- ✓ Ideal time for transition as there are no significant methodology or core data updates such as Water Contract Alignment Process or Sewer Shares
 - ✓ All Member Partners should expect a System Average charge adjustment
 - ✓ Note: There are four water contract reopeners – impact to be determined



Section 4 – Achievements in Controlling Budget & Charges

✓ Cumulative Budget Well Under the 4% Promise



* Founding documents require that budget increase for first ten years (FY 2016 thru FY 2025) would not exceed 4%

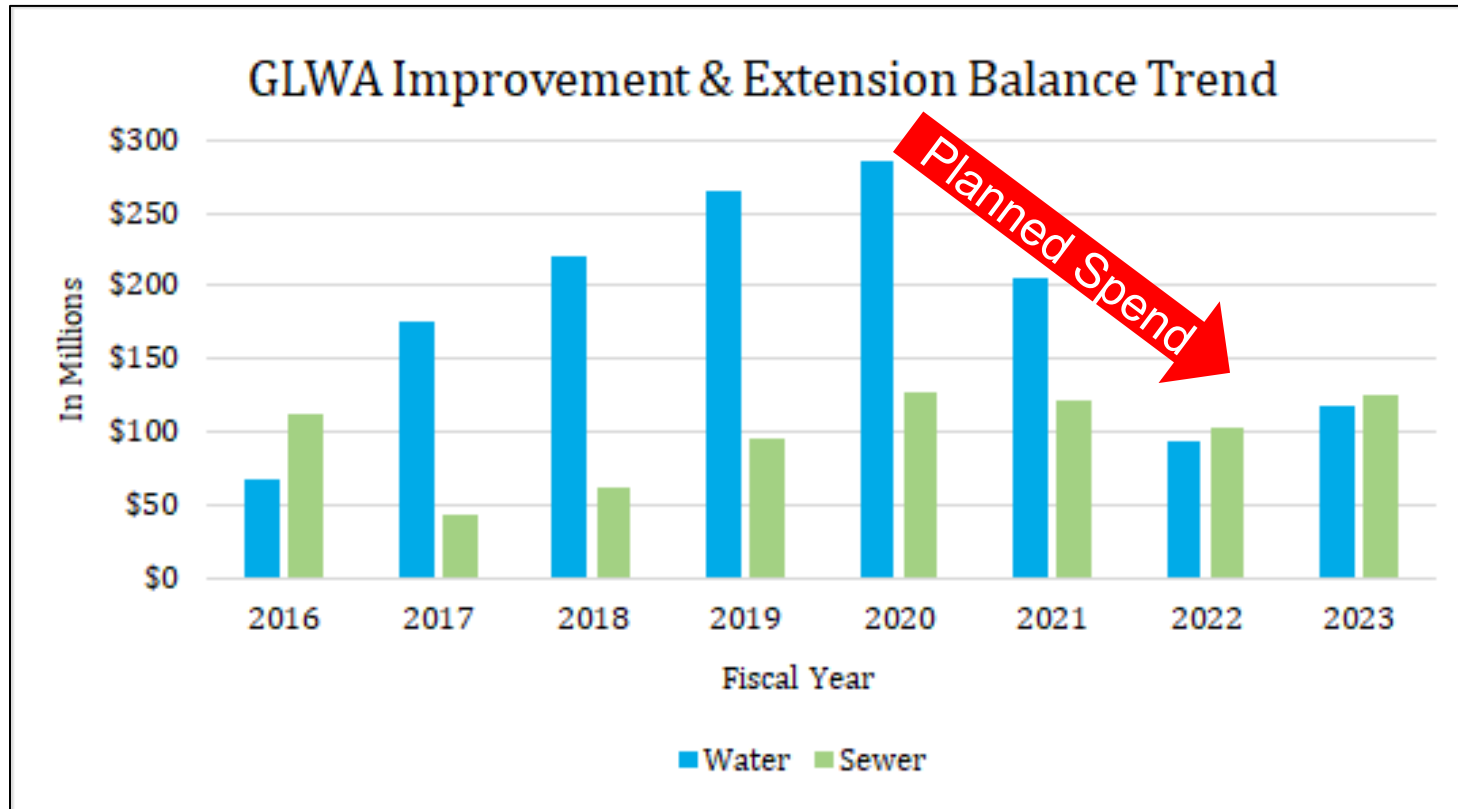
✓ Cumulative Charges Well Under the 4% Promise

- Significant Charge Stability
- Nine-year actual Average Annual Charges Increase
 - Water: 2.6%
 - Wastewater: 2.1%

Average System Charge Adjustments

Year	Water	Sewer
2017	4.5%	8.3%
2018	1.8%	-0.7%
2019	1.8%	0.1%
2020	0.6%	0.8%
2021	3.2%	2.0%
2022	1.5%	0.6%
2023	3.7%	2.4%
2024	2.8%	2.8%
2025	3.3%	3.0%
9-Year Average	2.6%	2.1%

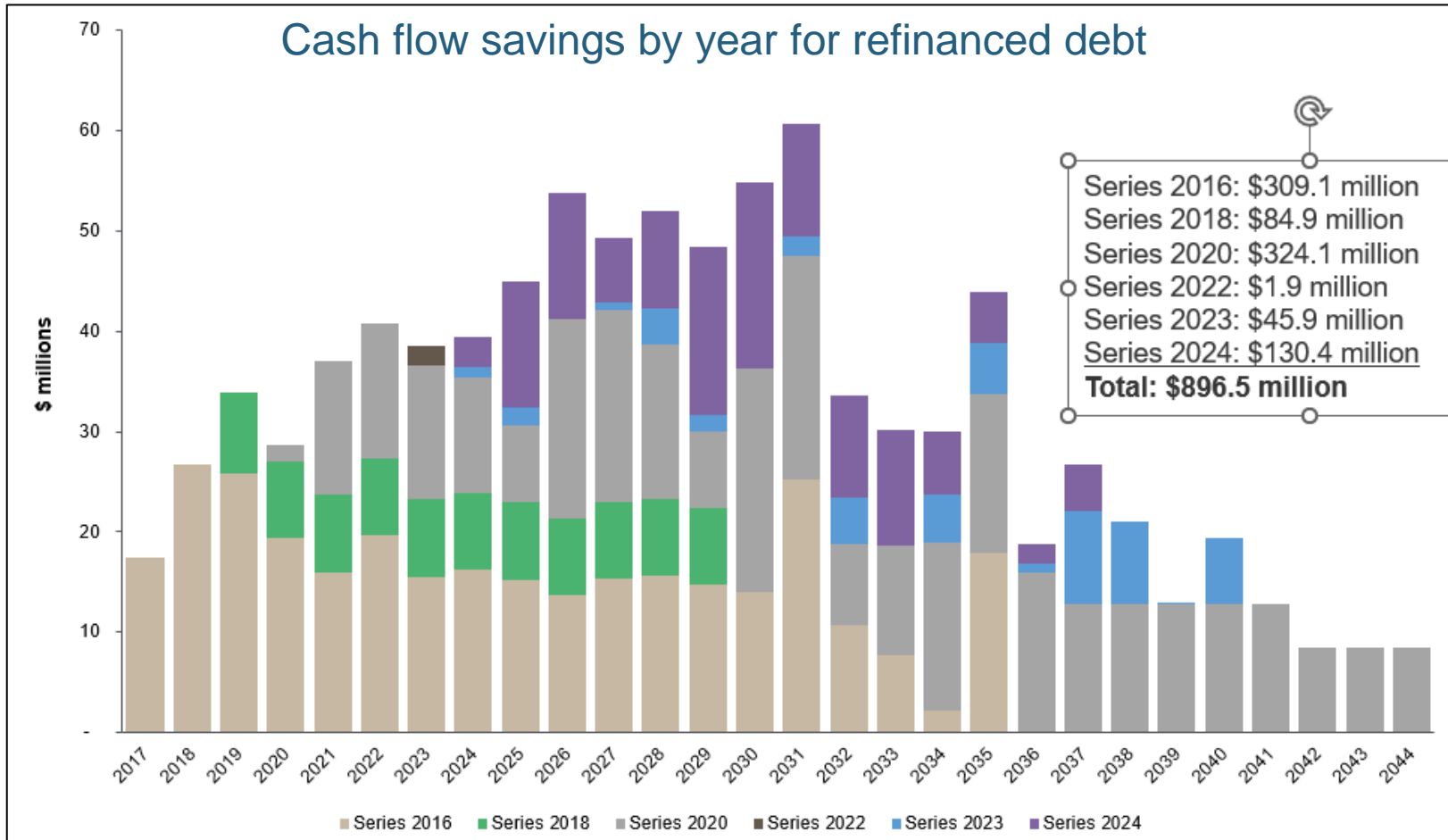
✓ Use Cash Reserves Wisely to Reduce Debt



Source: Great Lakes Water Authority Annual Financial Reports

- Years of positive budget variances and budget allocations increased cash balances in the Improvement & Extension Fund
- This allowed GLWA to have a “debt holiday” to fund the capital program at a time when investment rate of return on those funds would have been low
- Current and forecast levels are stabilized to maintain adequate reserves – a key point for rating agencies and investors

✓ Proactively Manage Debt to Secure Savings

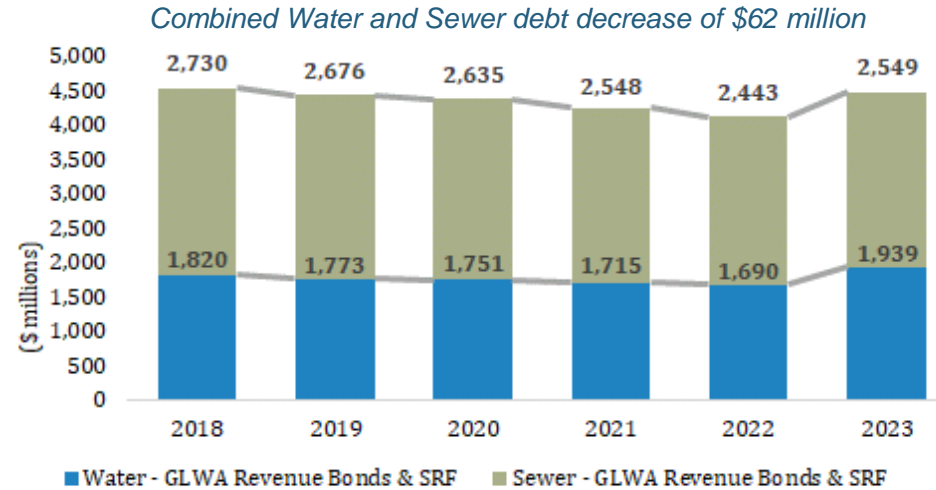


- GLWA has achieved nearly \$900 million in savings from future cash flow debt service requirements since the stand-up of GLWA
- Strategies have included taxable refunding, non-taxable refunding, and tender transactions
- Outstanding debt is monitored for optimal refunding opportunities

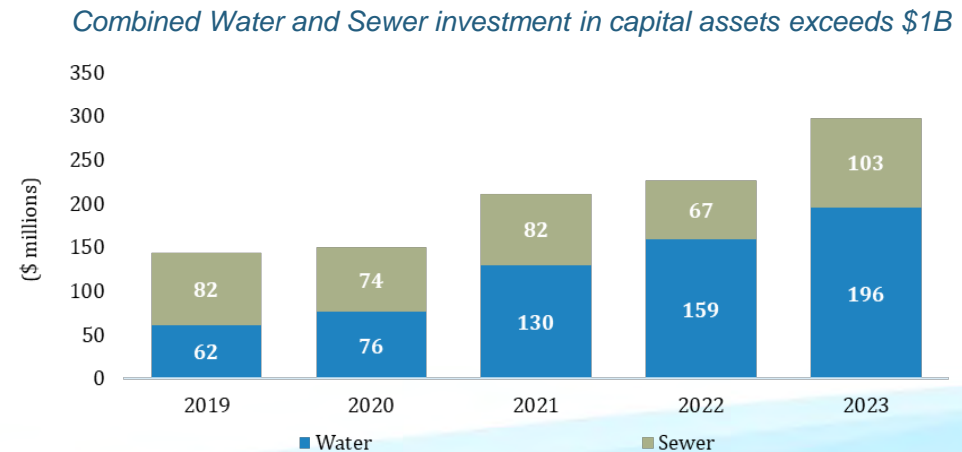
✓ Controlling Leverage While Investing in Capital Assets

- Because of success in limiting customer charge increases, conventional financial leverage metrics, such as debt to operating revenue (while improving), do not capture the full extent deleveraging and improvements to overall financial sustainability of GLWA
- GLWA's results over the last five years demonstrate significant progress in managing debt while investing in capital assets
 - Water system bonds and loans outstanding *increased* from year end 2018 to 2023 by \$119M while \$623M was invested in capital assets
 - Sewer system bonds and loans outstanding *decreased* from year end 2018 to 2023 by \$181M while \$408M was invested in capital assets

GLWA Water & Sewer Revenue Bonds & SRF Outstanding (Year End)



Capital Project Investments Activity



Source: GLWA financial statements
 *Outstanding debt net of current and non-current contract obligations

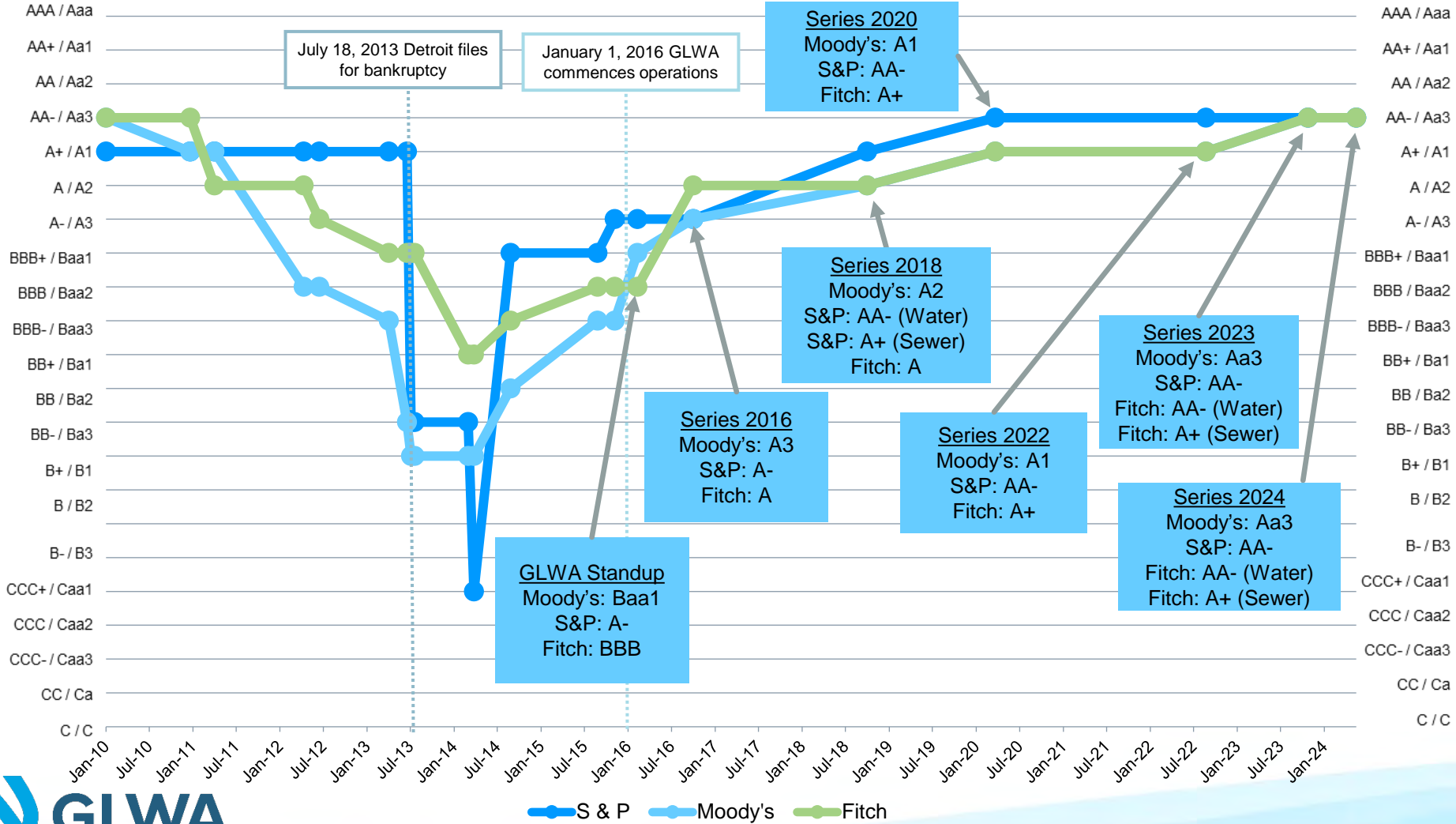
✓ Eliminate Reserve Fund Requirement for Current and Future Bonds

- Goal set in 2016 - Achieve a “AA” category rating from at least two rating agencies to reduce / eliminate the need to fund a debt reserve
- Accomplishments
 - October 2024 – Rating criteria goal achieved
 - May 2024 – Refunding bond transaction leveraged the new provision to reduce debt / enhance cash flow savings
 - \$16.1 million released from the Water System reserve accounts
 - \$16.1 million released from the Sewer System reserve accounts
 - Reduces future reserve requirement to zero
- Outcome - Overall lower cost of borrowing and more efficient cash management

**\$32.2
Million
Released**

History of Senior Lien Water and Sewer Ratings

GLWA Senior Lien Ratings History (DWSD Prior to January 1, 2016)



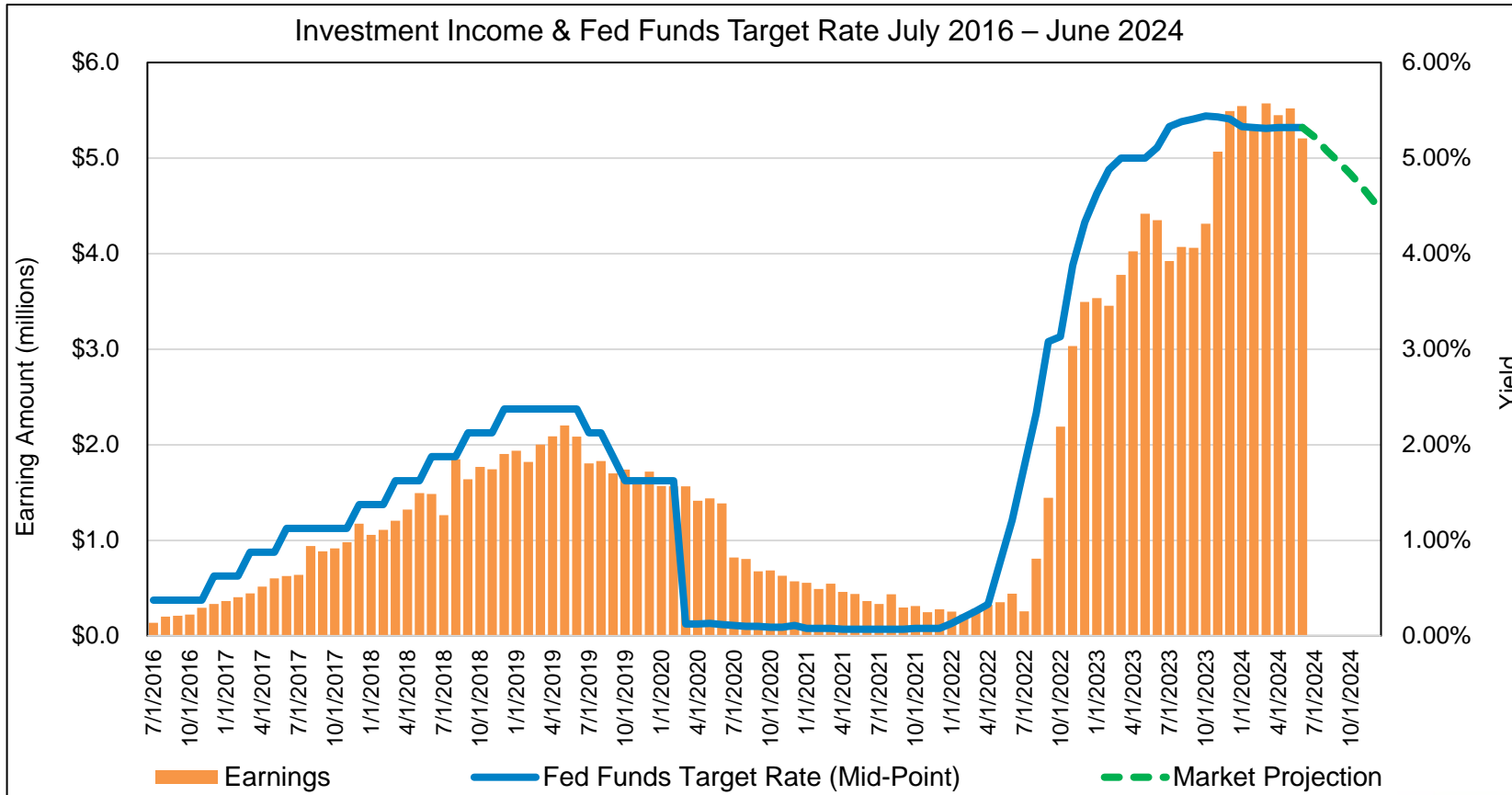
- Ratings can decline quickly, but the path to increased ratings is a long journey
- GLWA is committed to strengthening credit quality
- Key metrics align with the financial plan including
 - Debt Service Coverage
 - Days Cash on Hand
 - Steady Revenue Growth



Note: in cases where a rating agency rates Water Senior and Sewer Senior Lien differently, chart displays highest of the two ratings

✓ Optimize Investment Revenue

Monthly Investment Income & Fed Funds Rate



- ✓ Since inception, a professional investment management program strengthened the rate of return on investments
- ✓ Based on liquidity needs, 50% or more of the portfolio is for obligations that are 12 months or less. The result is a short-term duration of the portfolio and heavily impacted by changes in the Federal Funds target rate; the chart shows income consistently following the Fed Funds rate.
- ✓ Note: The pace and magnitude of future Fed rate cuts is uncertain. That While investment earning offset a significant portion if charges increase in recent years, that trend may weaken.

✓ Seek New Revenue Sources – Grant Activity

GLWA continues to expand efforts to pursue and track grant funding opportunities.

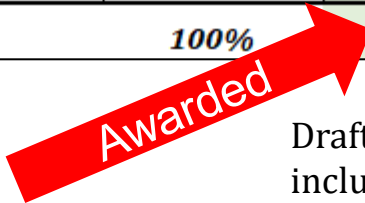
- The **pre-award phase** includes the grant application process and the period prior to the signing of the grant agreement between the awarding agency and GLWA.
 - Presently, this consists of **9 programs totaling \$45.8 million**
- The **award phase** reflects the period after the agreement is executed with the awarding agency. In this phase, GLWA becomes responsible for meeting the administrative, financial, and programmatic reporting requirements of the award.
 - Presently, this consists of **12 grants with \$29.5 million in total funding**
- The **post award** phase is the final stage of grant activity and includes final reporting requirements, auditing, and closeout. There are final financial and programmatic reports that must be submitted to formally close out the grant as defined in each grant agreement.
 - There currently **3 grants in this phase totaling \$400k.**
- The **award completion** phase tracks historic grant activity for reporting purposes.
 - Since FY 2020, GLWA successfully completed **19 grants totaling \$36.3 million**
- The **programs not awarded** category reflects programs that GLWA was not awarded, or alternatively, programs that will not continue to be pursued by GLWA.
 - Since FY 2020, this consists of **8 grant applications totaling \$548.3 million**



Section 5 – Areas of Focus

FY 2025 CWSRF Award at 14% of Submittals

CIP Project #	Description	Application Amount	Draft IUP Loan Amount	Not Within Fundable Range
211007	5837-01 Pumpstation #2 Bar Rack Replacements and Grit Collection System Improvements	\$201.60	\$0.00	\$201.60
216008	5839-01 Rehabilitation of Screened Final Effluent (SFE) Pump Station	\$101.00	\$0.00	\$101.00
211005	5859-01 Pump Station #2 Variable Frequency Drive (VFD) Replacement	\$13.00	\$0.00	\$13.00
270004	6001-01 Combined Sewer Overflow (CSO) Improvement Project - Oakwood & Lieb	\$57.10	\$57.10	\$0.00
260206	6003-01 Rehabilitation of 7 Mile Sewer System	\$30.00	\$0.00	\$30.00
260510	6004-01 CSO Outfall Rehabilitation Phase VI (Rouge River Outfalls and Associated Gravity)	\$10.00	\$0.00	\$10.00
CWSRF Total		\$412.70	\$57.10	\$355.60
<i>Percentage Awarded vs. Applications Submitted</i>		<i>100%</i>	<i>14%</i>	<i>86%</i>



Draft award of \$57.1M includes 4.2M of loan forgiveness

- Historically, availability and award of Clean Water State Revolving Fund Loans (CWSRF) provided relief to sewer system financial demands.
- Declining funding overall and changing criteria are a concern
- For the State of Michigan’s FY 2025, the CWSRF Draft Intended Use Plan (IUP) indicates that only 14% of GLWA’s submitted projects will be funded
- Final CWSRF IUP is expected in October 2024

Declining Clean Water SRF Available

Last Year (FY 2024) CWSRF Funding

In summary, EGLE plans to award the following in FY2024:

Table 4 Proposed Total Funds in FY2024

Award	Amount
ARP Grant	\$202,968,158
CWSRF Loan	\$842,928,342
Traditional Forgiveness	\$13,900,000
BIL PFAS Forgiveness	\$9,144,000
BIL CWSRF loan	\$45,708,750
BIL CWSRF Forgiveness	\$43,916,250
Total	\$1,158,565,500

This Year (FY 2025) Draft IUP CWSRF Funding

In summary, EGLE plans to award the following in FY2025:

Table 3 Proposed Total Funds in FY2025

Award	Amount
CWSRF Loan	\$565,000,000
Traditional Forgiveness	\$14,040,800
BIL EC Forgiveness	\$9,227,000
BIL CWSRF Supplemental loan	\$49,869,840
BIL CWSRF Supplemental Forgiveness	\$47,914,160
Total	\$686,051,800

Less funding available



BIL: Bipartisan Infrastructure Law

Declining Drinking Water SRF Available

Last Year (FY 2024) DWSRF Funding

In summary, EGLE plans to award the following in FY2024:

Table 3 Proposed Total Funds in FY2024

Allocation	Amount
ARP SRF Grant	\$376,141,738
DWSRF Loan	\$116,430,961
DWSRF Loan Forgiveness	\$3,569,039
BIL Supplemental Loan	\$19,001,420
BIL Supplemental Loan Forgiveness	\$23,540,580
BIL Emerging Contaminants Loan Forgiveness	\$26,224,000
BIL LSLR Loan	\$55,742,258*
BIL LSLR Loan Forgiveness	\$53,556,287*
Drinking Water Infrastructure Grant	\$7,707,728
ARP LSLR/Watermain Grant	\$78,800,000
Total	\$760,714,011

*BIL DWSRF LSLR loan and PF categories have been overcommitted by \$7,354 and \$7,065 respectively. EGLE anticipates projects will drop/decline LSLR dollars. To spend 100% of BIL available dollars in FY24, these two buckets have been overcommitted on the PPL.

Draft DWSRF Funding Available as of August 2025

In summary, EGLE's available funds for FY2025:

Table 3 Proposed Total Funds in FY2024

Allocation	Amount
DWSRF Loan	\$280,800,000
DWSRF Principal Forgiveness	\$5,000,000
BIL DWSRF Supplemental Loan	\$38,980,554
BIL DWSRF Supplemental Principal Forgiveness	\$36,712,040
BIL DWSRF Emerging Contaminants Principal Forgiveness	\$22,152,890
BIL DWSRF LSLR Loan	\$43,706,853*
DWSRF Loan	\$280,800,000
DWSRF Principal Forgiveness	\$5,000,000
Total	\$514,495,514

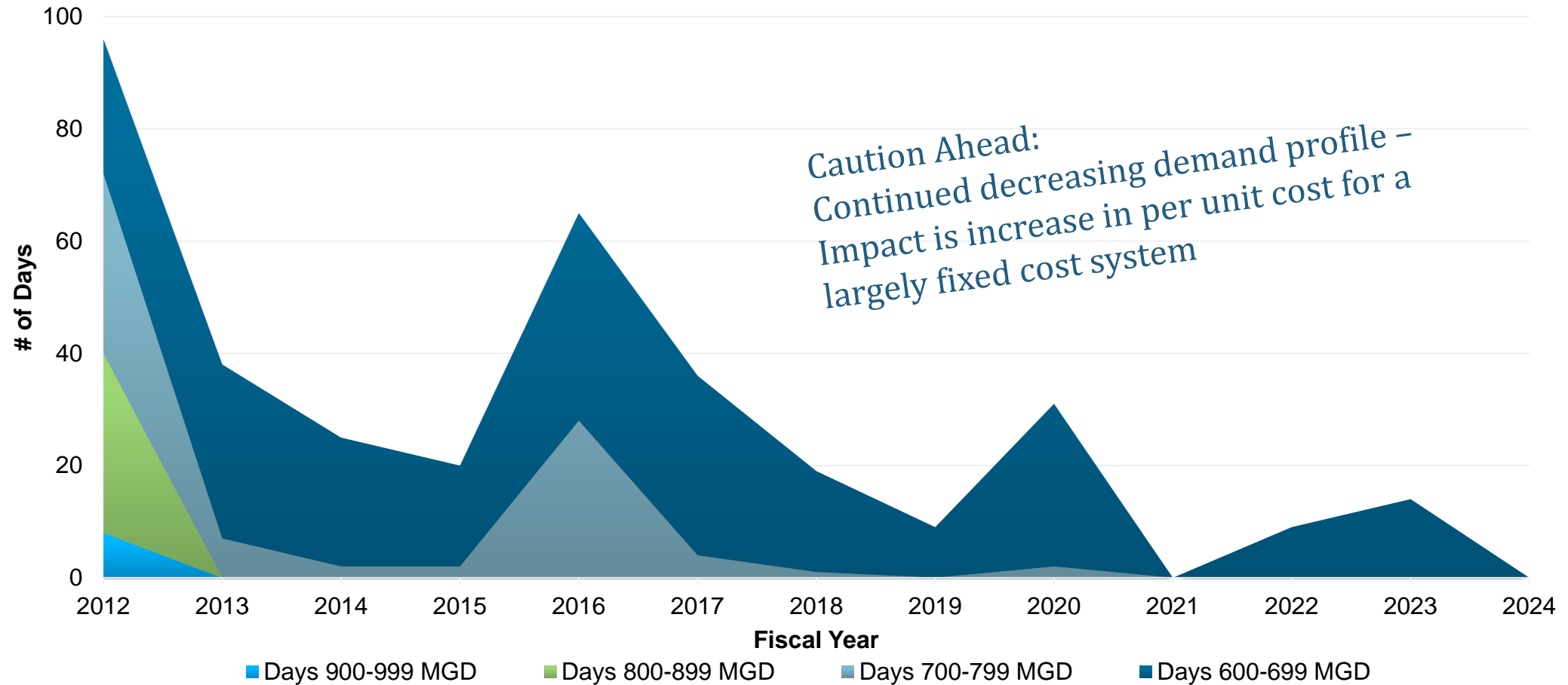
*Does not include \$1,300,000 being allocated for DWEHD set-aside use

Less funding available

Note: No Drinking Water SRF (DWSRF) projects submitted for FY 2025 due to active loans and construction activity underway

Declining Water Demands

Peak Demand Profile
2012-2024

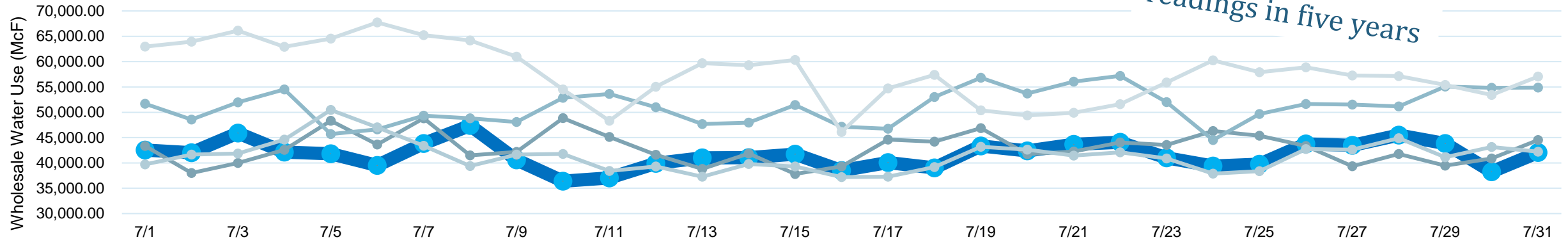


FY 2025 Monthly Usage

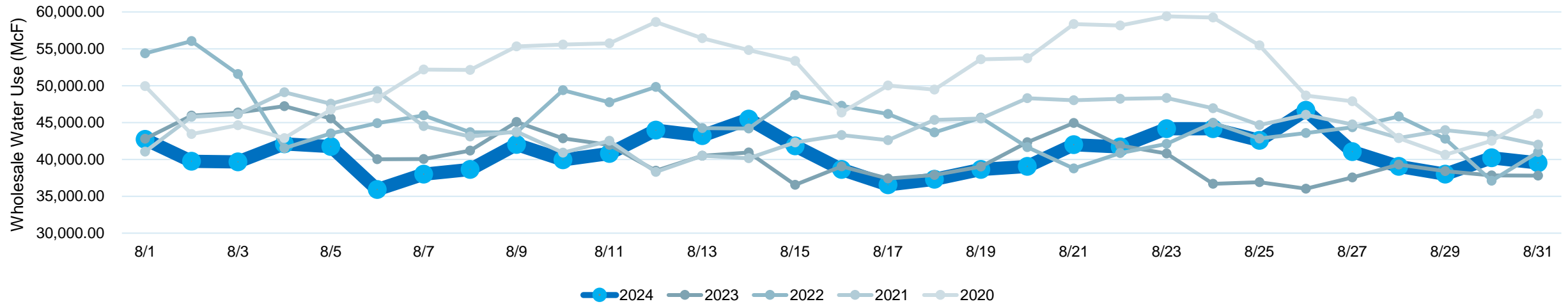
July & August 2024 among the lowest readings in five years

WAMR: Water Automatic Meter Reading system

July WAMR Usage 2020-2024



August WAMR Usage 2020-2024



● 2024 ● 2023 ● 2022 ● 2021 ● 2020



Utility & Commodity Cost Review

- 💧 Cross-functional report
- 💧 See separate slide deck



Section 6 – Managing Reliability: Tension Between Operating and Capital Spending

Wastewater Operational Complexity

- ◆ Level of Service
- ◆ Capital Portfolio of “NEEDS” not wants
- ◆ The compounding effects of aged equipment
- ◆ Regulatory complexity

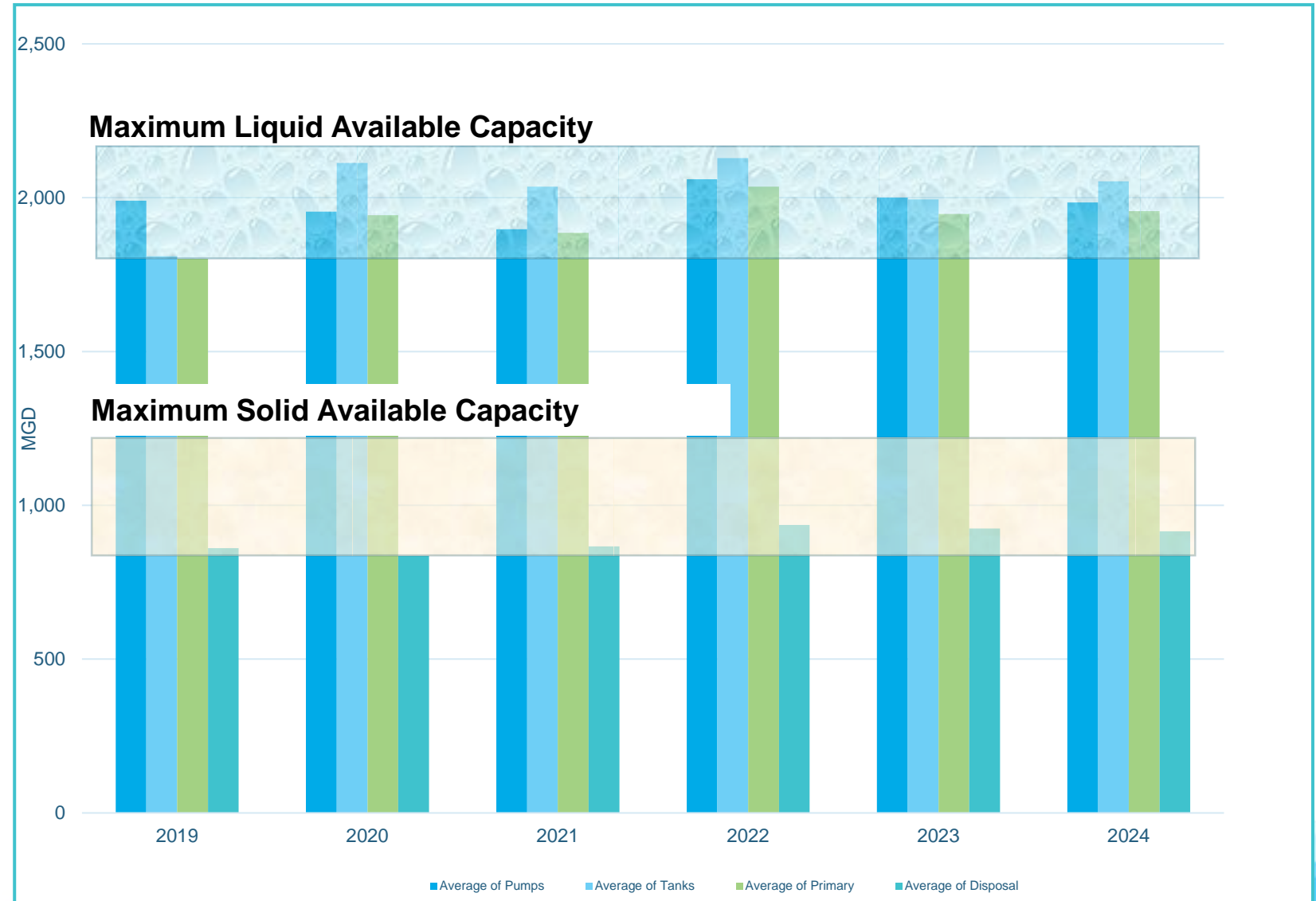
“Protect public health through resilient, sustainable, and efficient Operations, Maintenance and Engineering for Southeast Michigan”

Water Resource Recovery Facility Avail. Capacity

WRRF Capacity

WRRF Maintained 97% liquid stream Capacity compliance with its permit.

WRRF maintained 98% solids stream capacity* compliance with its permit.



* Solids Capacity is based on 10-day Average during a wet weather period.

Reliability Maintenance Engineering (RME)

💧 Improve equipment uptime and availability

💧 Facilities

💧 Fire alarm system complex, aged and requires regular maintenance in wastewater condition.

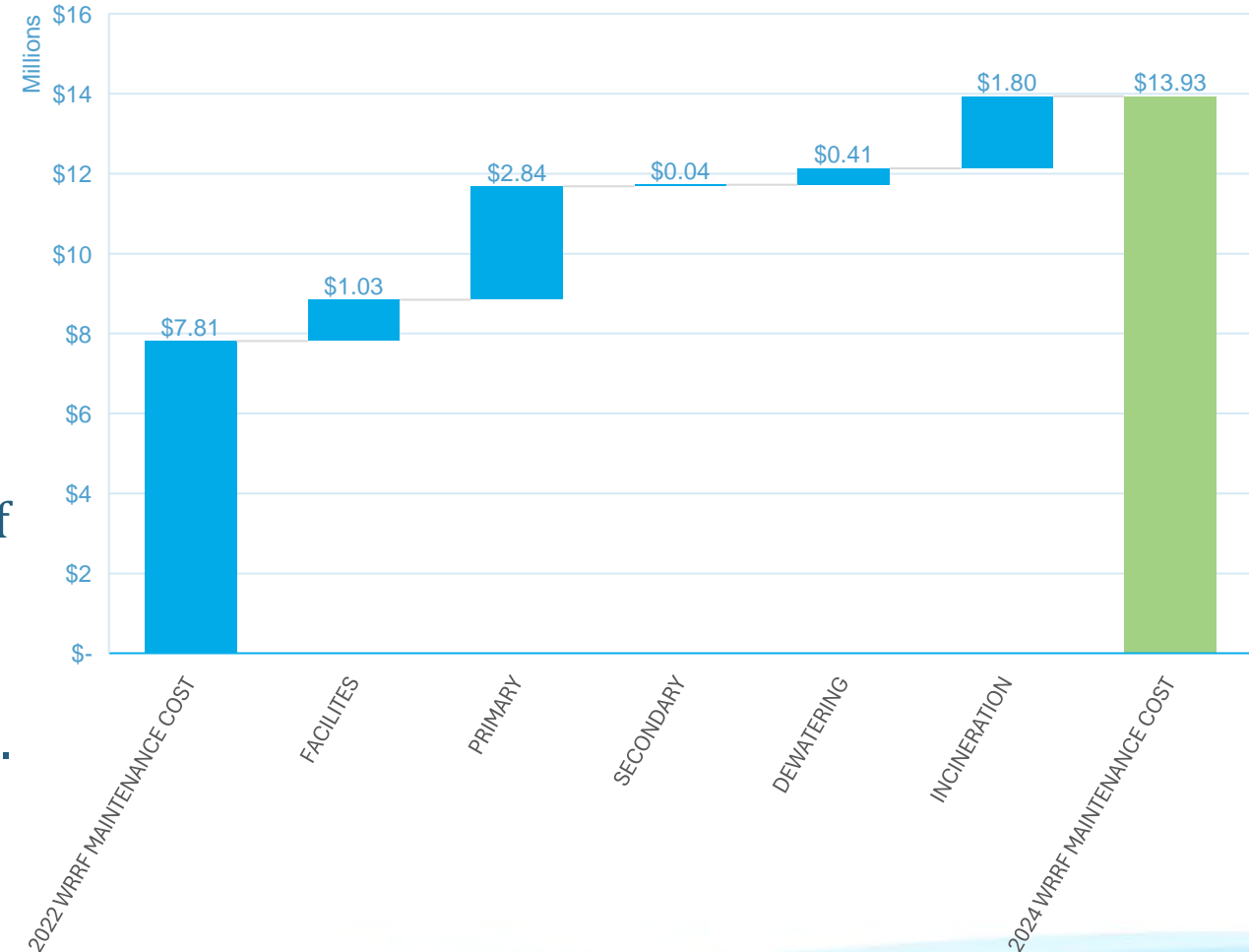
💧 Primary

💧 Pump Station #1 regular failure on the chain and flight for the Grit System, regular failure of the screening conveyor.

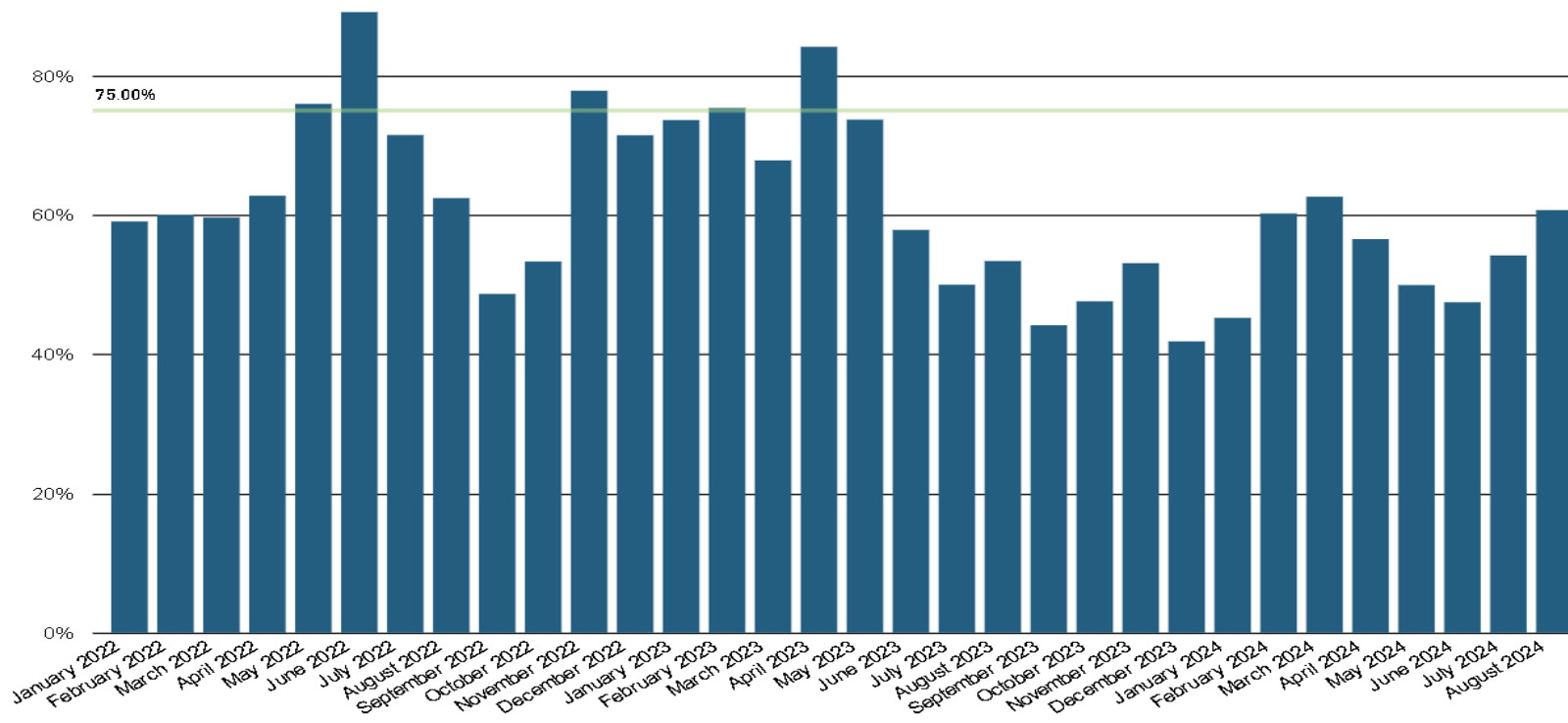
💧 Incineration

💧 Much of the facility has exceeded its useful life. Year over year increase in hours of repair.

Wastewater Maintenance Cost Increase



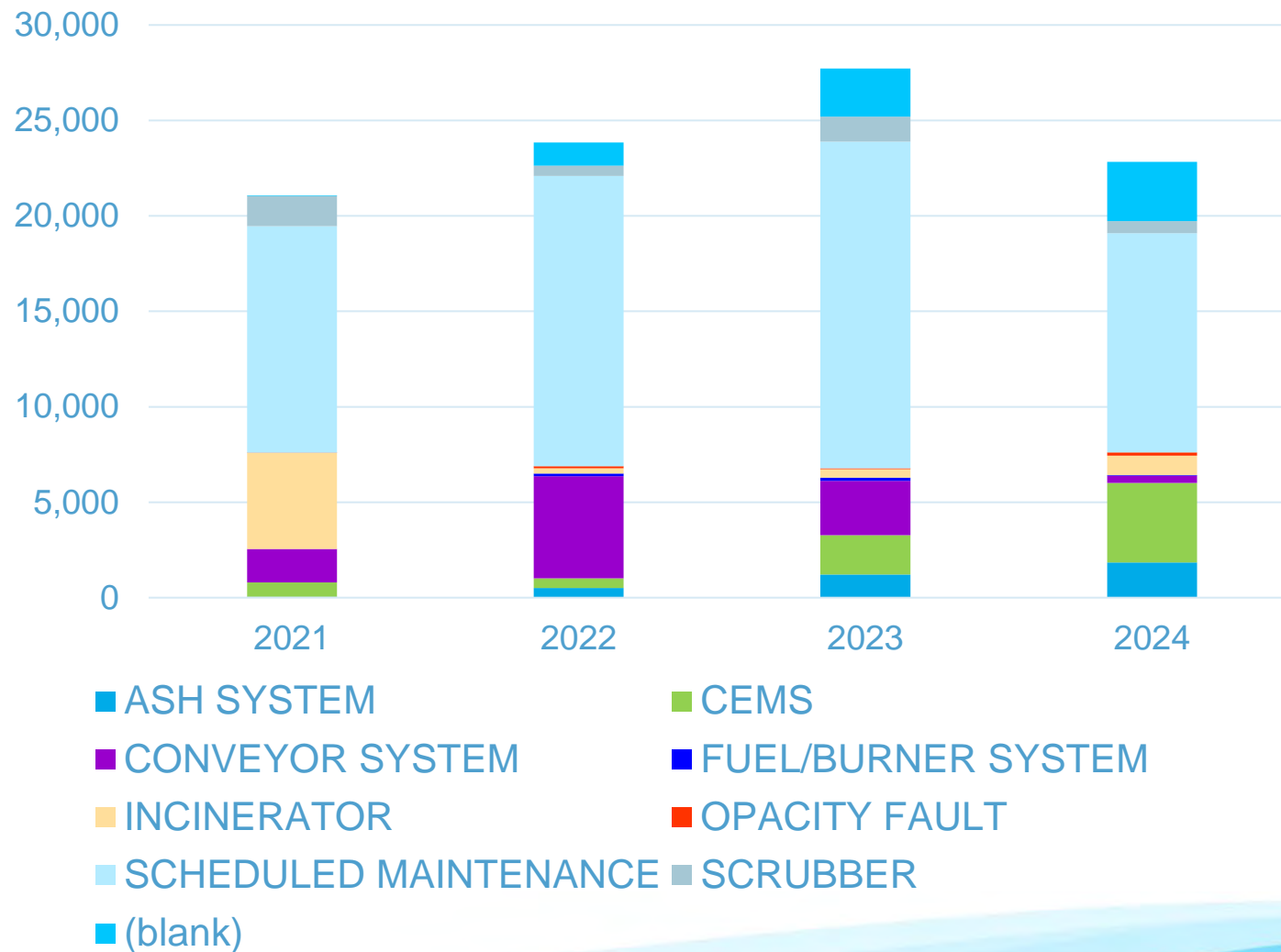
Wastewater Incineration Reliability



- Reliability of the incineration system continues to remain lower than desired performance
- The low availability requires operations to maintain additional units hot increasing facilities gas usage.

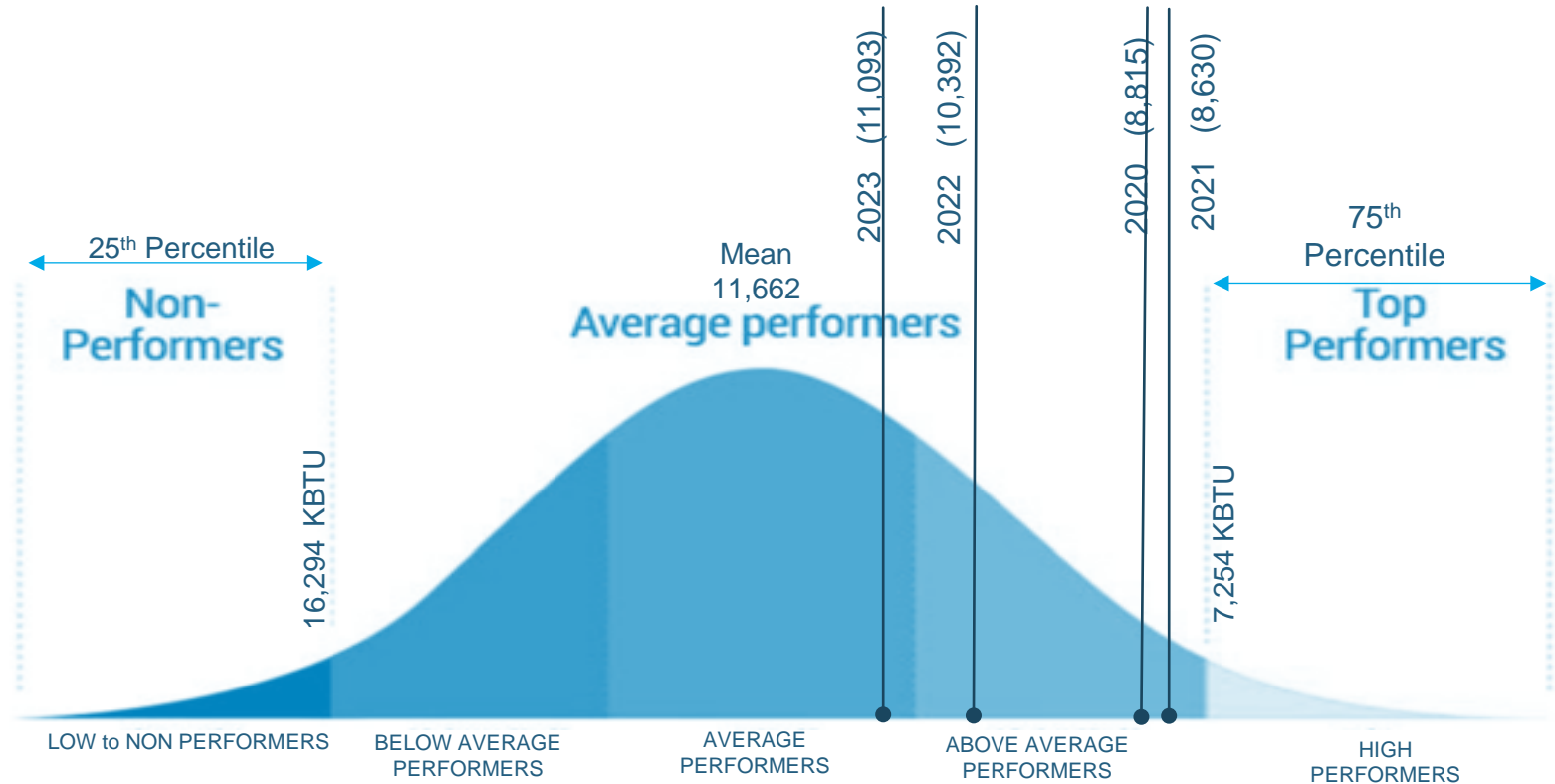
Wastewater Incineration Reliability

- 💧 Increase outage from Continues Emission Monitoring System failures.
- 💧 Increase scheduled Maintenance is necessary to combat the aging infrastructure.
- 💧 Complete overhaul of incineration can exceed \$600M.



Water Resource Recovery Operations

💧 The decrease in energy performance for treatment is contributed to the increase in gas usage.



***Aggregate data from 2023 AWWA Energy Consumption for Wastewater – Based on 48 Utilities Normalized to production (kBTU/Year/MG)**

Water Resource Recovery Power Usage

💧 The decrease in energy performance for treatment is contributed to the increase in gas usage.

💧 Majority of the increase is contributed to the incineration operations and condition.

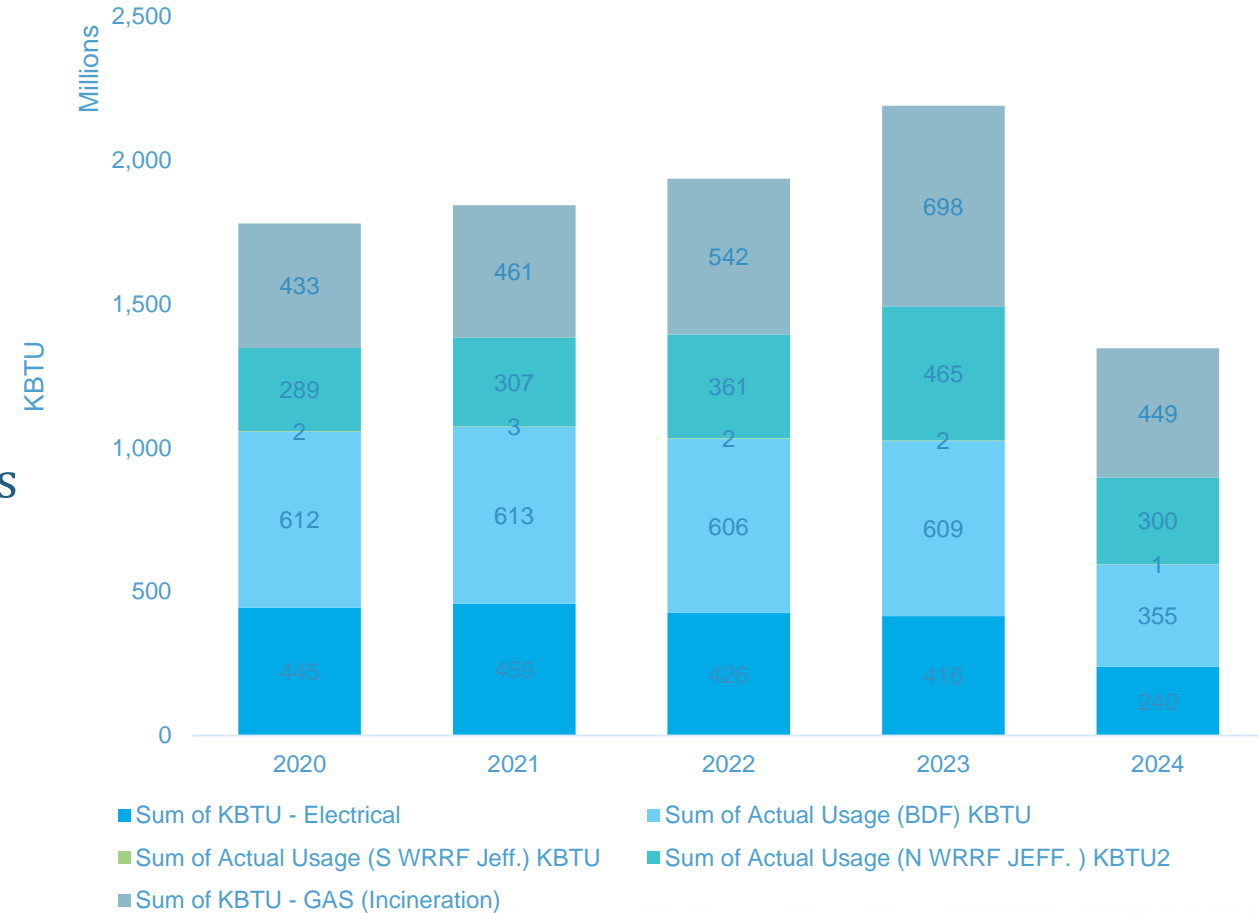
💧 Average BDF to process 75% of the biosolids is around 609M KBTU

💧 FY 24 Treatment Cost – approx. \$274 per Ton

💧 Average Incineration for 25% of the biosolids processing is around 533 KBTU and rising

💧 FY 24 Treatment Cost – approx. \$750 Per Ton

Wastewater Energy Usage



*2024 include up to July



Section 7 – Ten Year Financial Plan

Ten Year Financial Plan

- ◆ Present working financial plan is based on the May 2024 bond feasibility forecast published in conjunction with bond refunding transaction
- ◆ Internally, next 30 to 45 days, finalizing internal budget requests and realigning with that plan
- ◆ GLWA has utilized biennial budgeting published within a five-year financial plan that aligns with a ten-year forecast since inception
- ◆ This preferred practice forces reality in financial management to understand trends and the impact of decisions
- ◆ The goal is predictable and stable outcomes

Financial Plan Evolution: COVID / Post COVID

FY 2030 selected as a data point common to all forecasts to understand how economic news becoming an economic reality has impacted the budget and charges forecasts.

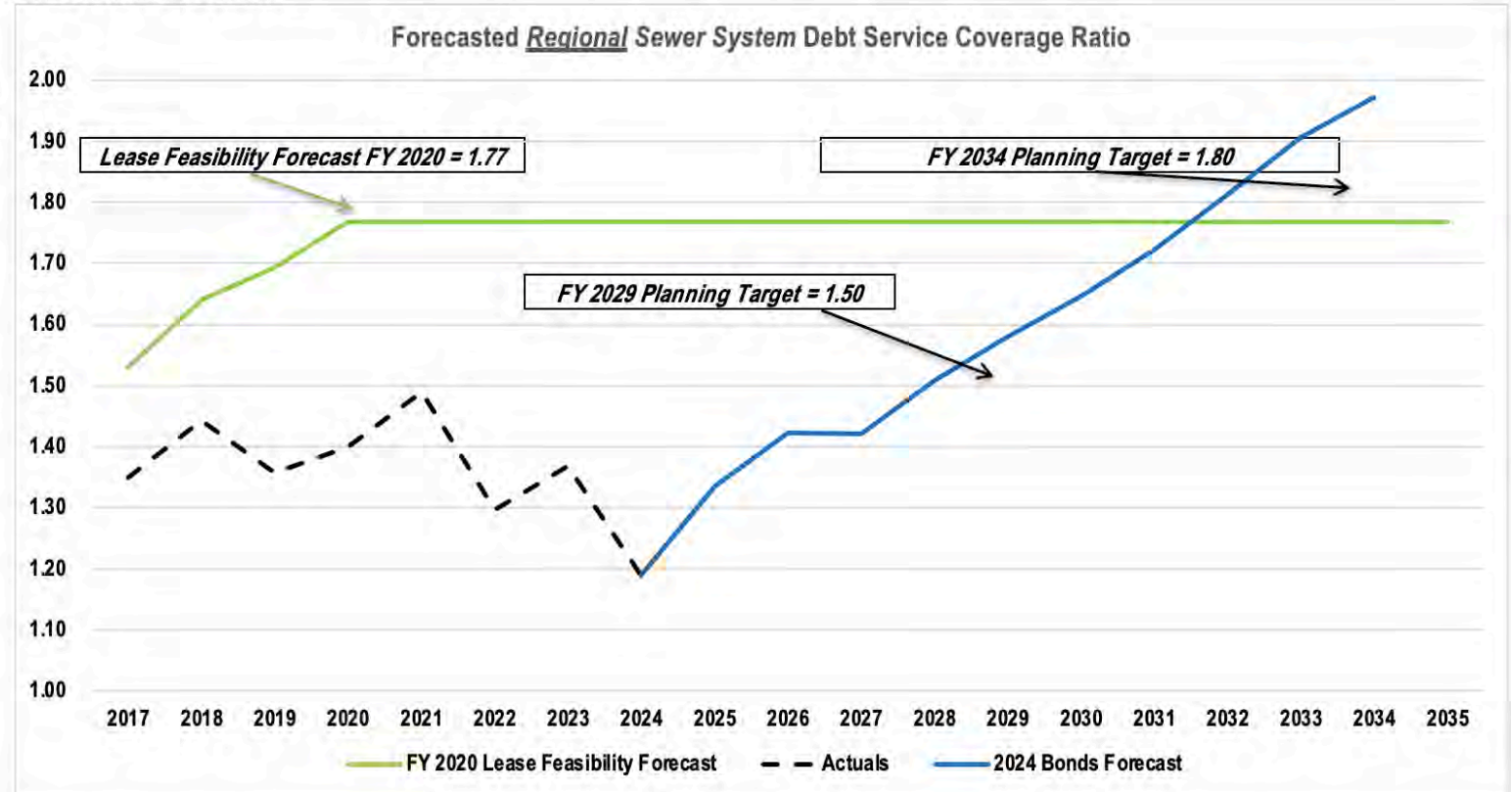
Published Forecast	Annual Water Budget Increase	Annual Water Charge Increase	FY 2030 Water Revenue (All Sources)	Annual Sewer Budget Increase	Annual Sewer Charge Increase	FY 2030 Sewer Revenue (All Sources)
July 2021 - Economic Outlook Task Force Initiated						
December 2021	3.50%	3.0% to 3.7%	\$453M	2.50%	2.1% to 3.7%	\$582M
July 2022	4.00%	2.1% to 4.1%	\$467M	4.00%	2.9% to 4.1%	\$634M
November 2022 - Economic Outlook Task Force - Phase I Report						
November 2022	4.00%	4.5% to 8%	\$530M or \$515M	3.0% to 5.0%	2.6% to 4.3%	\$639M
December 2022	4.0% to 6.0%	2.8% to 6.1%	\$515M	3.0% to 5.0%	2.8% to 5.1%	\$639M
February 2023	4.0% to 6.0%	2.8% to 6.1%	\$515M	3.0% to 5.0%	2.8% to 5.1%	\$639M
May 2024	6.0% to 7.5%	6.1% to 8.0%	\$547M	4.0% to 5.7%	4.0% to 5.9%	\$660M
Variance from December 2021 to May 2024			\$94M 21%			\$78M 13%

- The COVID shutdown occurred in March 2020.
- GLWA had many long-term contracts for commodities, engineering, and construction – this delayed the budget impact because costs were locked within contracts.
- Once new contracts were bid, the increased costs resulted in budget amendments and forecast assumption updates.
- The May 2024 forecast includes the debt service savings from the most recent bond transaction.

Sewer Ten Year Forecast Update In Progress

PRELIMINARY EXECUTIVE SUMMARY FORECAST UPDATE - SEWER

Core Assumptions	2024 Bonds Forecast	Updated Forecast
BUDGET Adjustments		
FY 2026 - FY 2029	5.50%	TBD
FY 2030 - FY 2034	4.00%	TBD
10 Yr Avg FY 2026 - 2035	4.6%	TBD
Cum Avg Annual GLWA Launch ->	3.2%	TBD



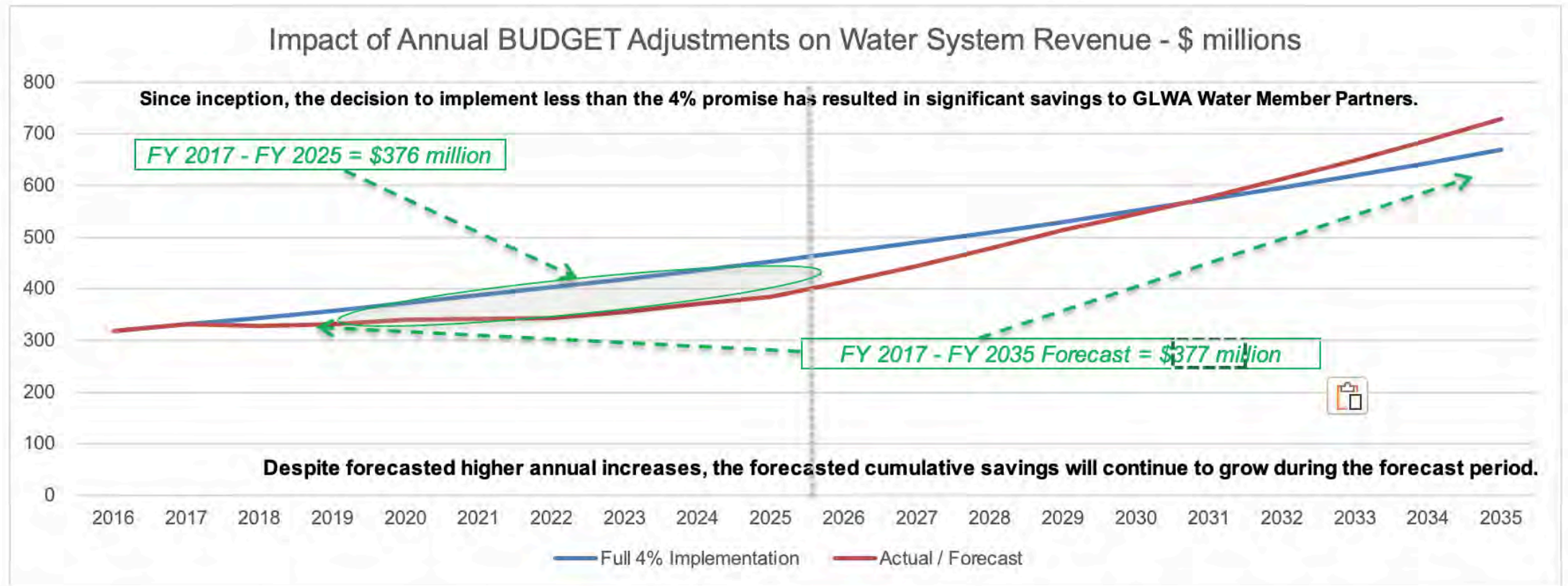
Note - this chart illustrates forecasted **Regional System** Debt Service Coverage. "All in" Total Debt Service Coverage will likely be ~ 0.10 lower once debt service assigned to the Local System, and **Local System** Net Revenues are included.

Regional System Cumulative Avg Annual Budget Increase

If 4% Promise Was Fully Implemented	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Actual & 2024 Bonds Forecast (current plan of record)	4.0%	2.1%	1.8%	1.9%	1.8%	1.1%	1.1%	1.5%	1.7%	2.1%	2.4%	2.7%	2.9%	3.0%	3.0%	3.1%	3.1%	3.2%	3.2%
Regional Actual Budget Adjustments	4.0%	0.3%	1.0%	2.2%	1.3%	-2.3%	1.3%	4.0%	4.0%										
Regional Forecasted Budget Adjustments										5.5%	5.5%	5.5%	5.5%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Regional Actual Charges Adjustments	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%										
Regional Forecasted Charges Adjustments										6.3%	6.6%	6.4%	6.9%	7.0%	6.7%	6.3%	6.7%	7.0%	4.2%

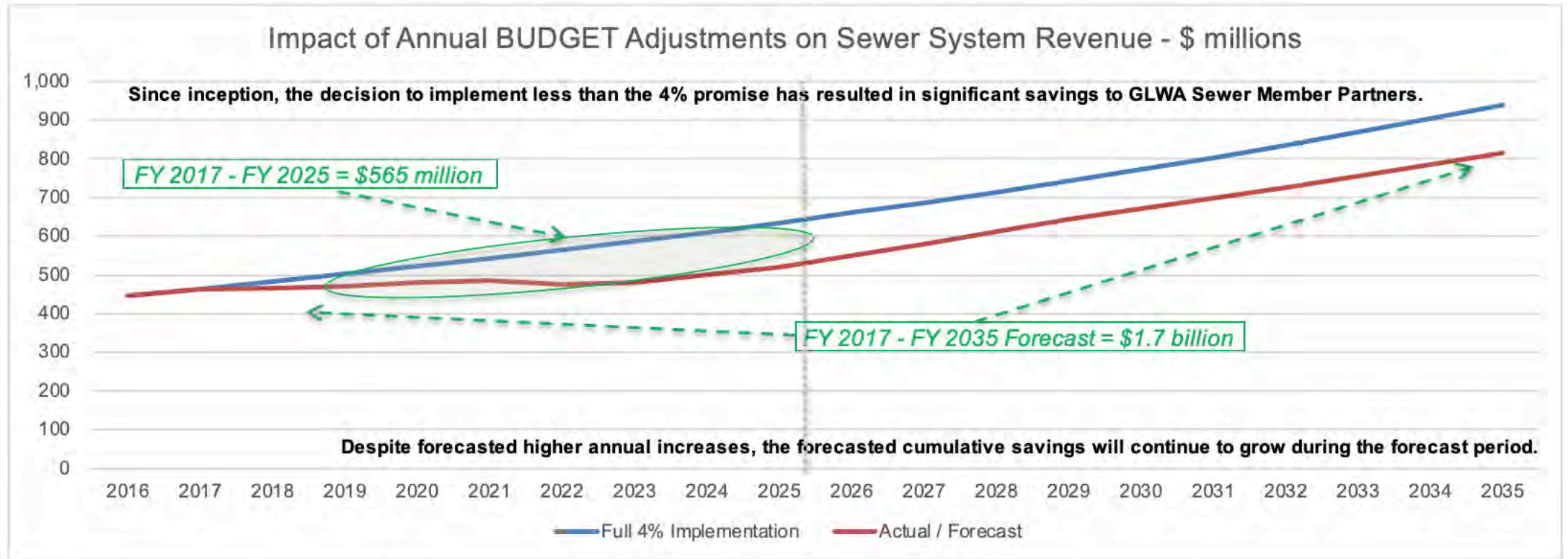


Water Forecast Update In Progress



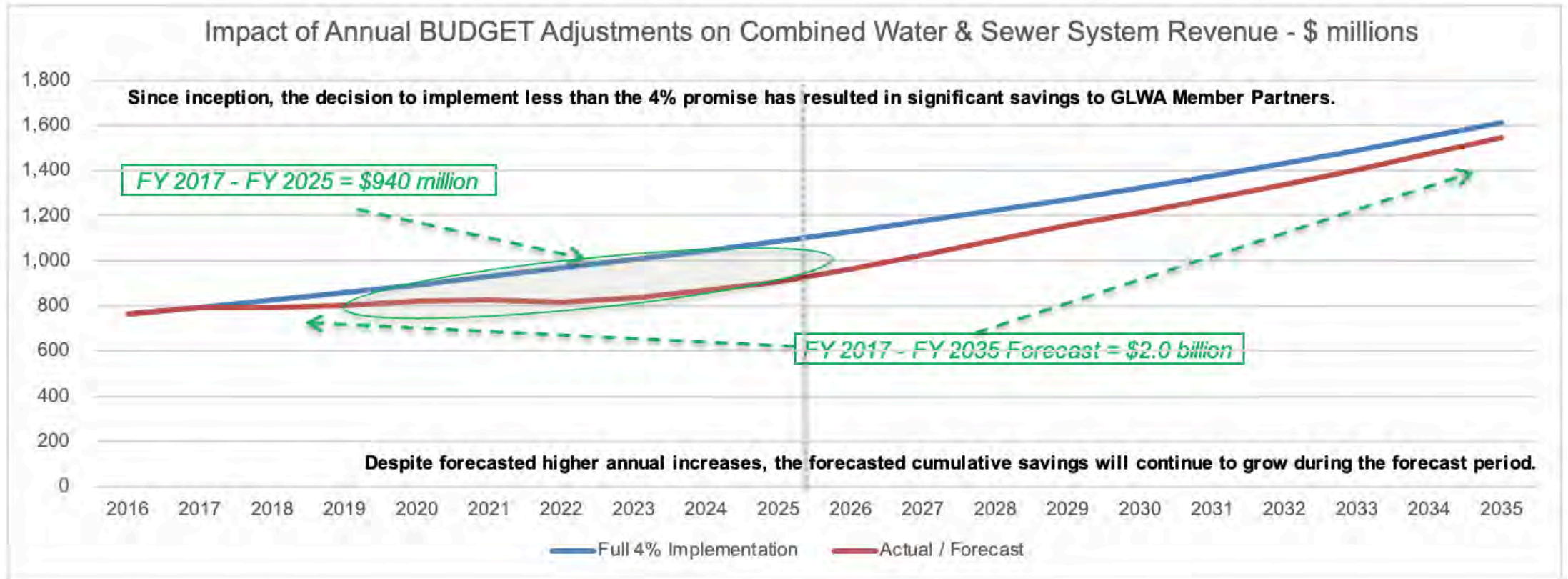
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Full 4% Implementation	318	331	344	358	372	387	402	418	435	453	471	490	509	529	551	573	596	619	644	670
Actual / Forecast	318	331	328	331	339	341	344	356	370	385	414	445	478	514	545	577	612	649	688	729
Revenue Variance	0	0	16	27	33	46	59	63	65	68	57	45	31	16	6	(5)	(16)	(29)	(43)	(59)
Cum Rev Variance	0	0	16	43	76	121	180	243	308	376	433	478	509	524	530	526	509	480	436	377

Sewer Forecast Update In Progress



	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Full 4% Implementation	446	464	482	502	522	543	564	587	610	635	660	687	714	743	772	803	835	869	904	940
Actual / Forecast	446	464	465	470	480	486	475	481	501	521	549	580	611	645	671	698	726	755	785	816
Revenue Variance	0	0	17	32	42	56	89	105	110	114	111	107	103	98	101	105	110	114	119	123
Cum Rev Variance	0	0	17	49	91	147	236	341	451	565	676	783	885	983	1,084	1,190	1,299	1,413	1,532	1,656

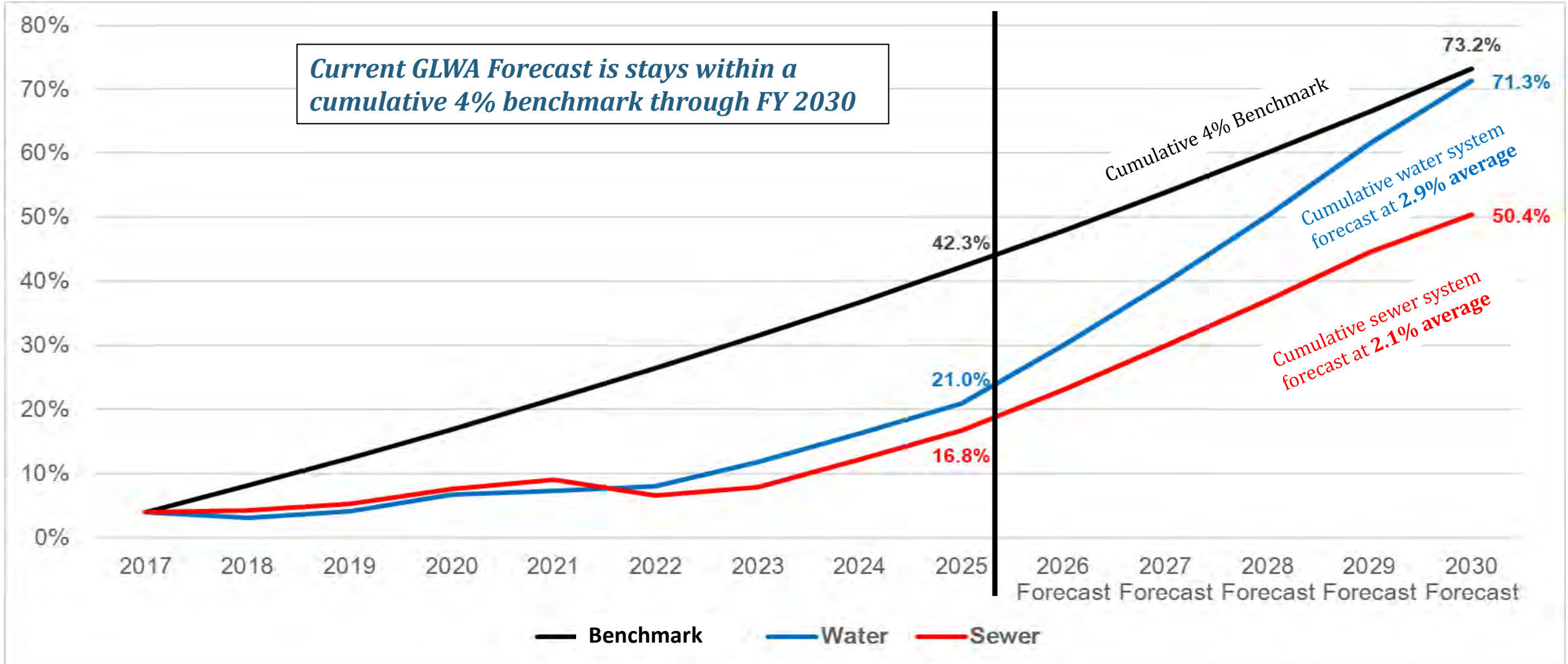
Total GLWA Forecast Update In Progress



Despite forecasted higher annual increases, the forecasted cumulative savings will continue to grow during the forecast period.

	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>
Full 4% Implementation	764	795	826	859	894	930	967	1,005	1,046	1,087	1,131	1,176	1,223	1,272	1,323	1,376	1,431	1,488	1,548	1,610
Actual / Forecast	764	795	793	801	820	828	819	837	871	906	963	1,024	1,089	1,159	1,216	1,275	1,338	1,403	1,473	1,545
Revenue Variance	0	0	33	58	74	102	148	168	175	182	168	152	134	113	107	101	93	85	75	64
Cum Rev Variance	0	0	33	92	166	268	416	584	759	940	1,108	1,260	1,394	1,507	1,615	1,715	1,809	1,893	1,969	2,033

✓ Actual + Forecast Budget Average < 4%



Forecast numbers based on feasibility study for 2024 bond issue

✓ Actual + Forecast Charges Average < 4%

- Significant Charge Stability
- Nine year actual plus five-year forecast
- 14-year Average Annual Charges Increase
 - Water: 4.0%
 - Wastewater: 3.3%

Average System Charge Adjustments

Year	Water	Sewer
2017	4.5%	8.3%
2018	1.8%	-0.7%
2019	1.8%	0.1%
2020	0.6%	0.8%
2021	3.2%	2.0%
2022	1.5%	0.6%
2023	3.7%	2.4%
2024	2.8%	2.8%
2025	3.3%	3.0%
2026 Forecast	6.3%	5.8%
2027 Forecast	6.6%	5.4%
2028 Forecast	6.4%	5.3%
2029 Forecast	6.9%	5.8%
2030 Forecast	7.0%	4.9%
14-Year Average	4.0%	3.3%

Forecast numbers based on feasibility study for 2024 bond issue



Wrap-up

Long-term Affordability of Services

- Balancing service level needs through reasonable operating and capital investments in the system supports long-term affordability
- Maturity of GLWA as we approach our tenth year is reflected in talented team members committed to making the system better for the region - and more cost effective for the long-term
- Efforts to control budgets and charges to low single digits while experiencing medium to high double digit cost increases results in proposed budget and charges above the 4% benchmark
 - However, may still be able to achieve staying within the 4% cumulative benchmark through 2030 based on current forecast
- That being said, there are forces beyond our control
 - Infrastructure supply chain resources continue to be a concern – people and materials
 - Increasing focus on information technology and data system management
 - Prudent financial planning supports resiliency when facing challenges
 - Avoid spikes in budgets and charges by focus on smoothing out annual adjustments when possible

Key Takeaways

1. Review timeline for budget and charges season
2. Economic outlook: moderate adjustments after era of historic increases
3. No new charges methodology impacts this year; declining water demand is under watch
4. Achievements in controlling budget and charges
5. Areas of focus – commodities, capital, and financing
6. Operations Report: Managing reliability and expected levels of service at the water resource recovery facility and the tension between operating and capital spending
7. The ten-year financial plan forecast provides a roadmap to better understand and prepare for future challenges



Utility Cost Review

September 2024 | Cost Review Tactical Team

Presentation Contributors



Matthew S. Lane, MPA
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Director - Energy & Resiliency



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Project Overview

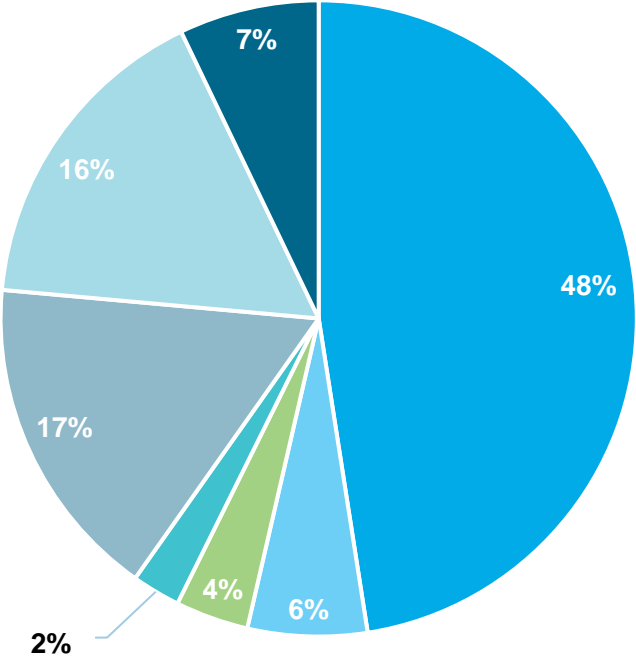
- ◆ This team was tasked to analyze budget recommendations to actual costs in 2023 and has subsequently prepared and periodically update material to illustrate the impact on GLWA in light of recent cost increases in non-discretionary purchases of these commodities
 - ◆ *Collectively, the total costs of these commodities in FY 2025 are anticipated to be approximately 55% higher than costs experienced in FY 2020 (base FY for comparison)*
- ◆ In each of the exhibits in this Executive Summary;
 - ◆ Budget figures represent original budget as adopted by the GLWA Board of Directors
 - ◆ FY 2024 “Actuals” represent the unaudited activity through 06/30/2024
 - ◆ FY 2025 “Actuals” represent projected FY 2024 “Actuals” with an inflation factor (2.5%)
 - ◆ FY 2026 “Actuals” represent projected FY 2025 “Actuals” with an inflation factor (2.5%)
- ◆ Each section of this presentation highlights talking points that help explain the specific drivers behind the increases being observed



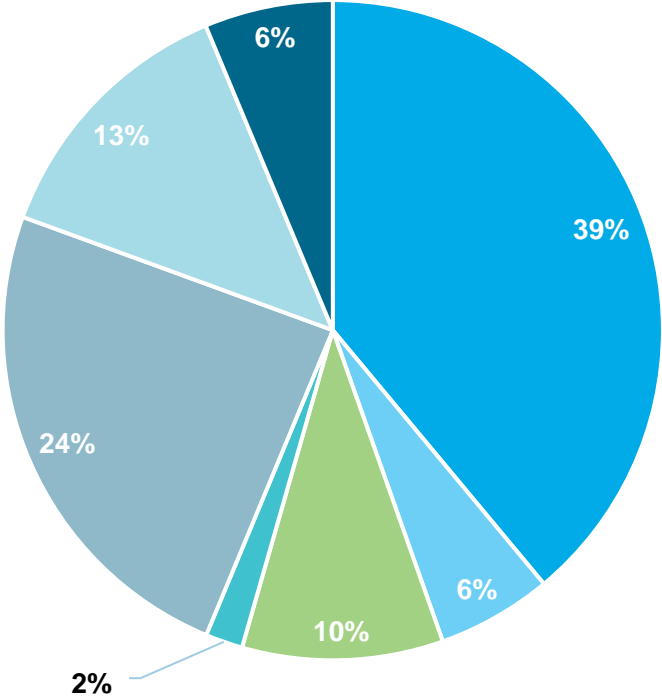
Commodity Costs – Usage and Costs

Commodities Overall – Executive Summary

FY 2020 Actuals



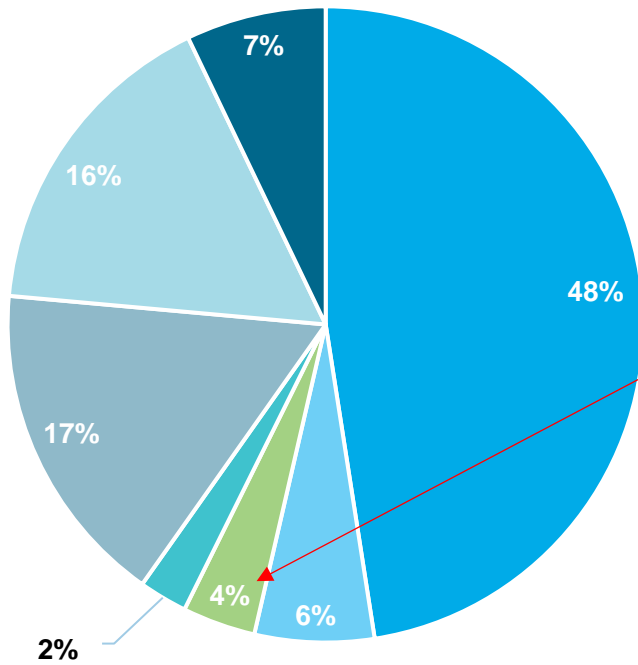
FY 2024 Preliminary Actuals



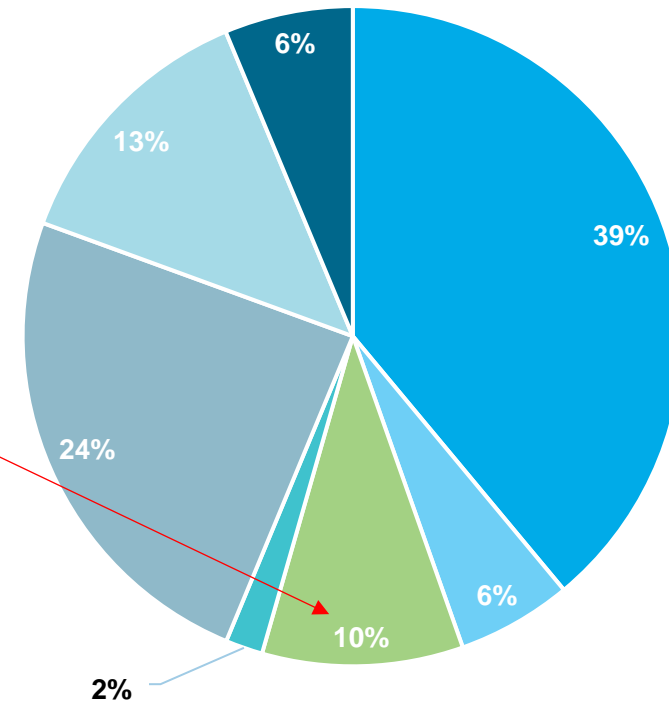
- Electricity
- Gas
- Water
- Sewer
- Chemicals
- WW Sludge
- Water Alum Sludge

Water – Executive Summary

FY 2020 Actuals



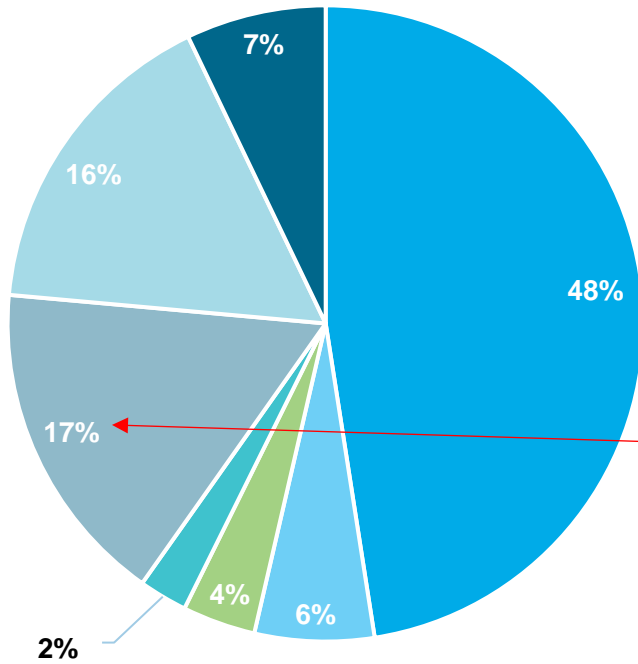
FY 2024 Preliminary Actuals



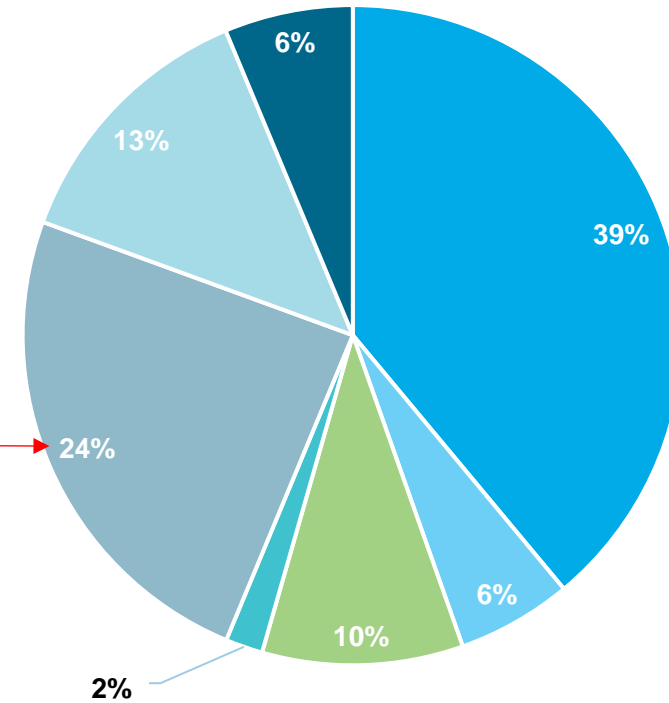
- Electricity
- Gas
- Water
- Sewer
- Chemicals
- WW Sludge
- Water Alum Sludge

Chemicals - Executive Summary

FY 2020 Actuals



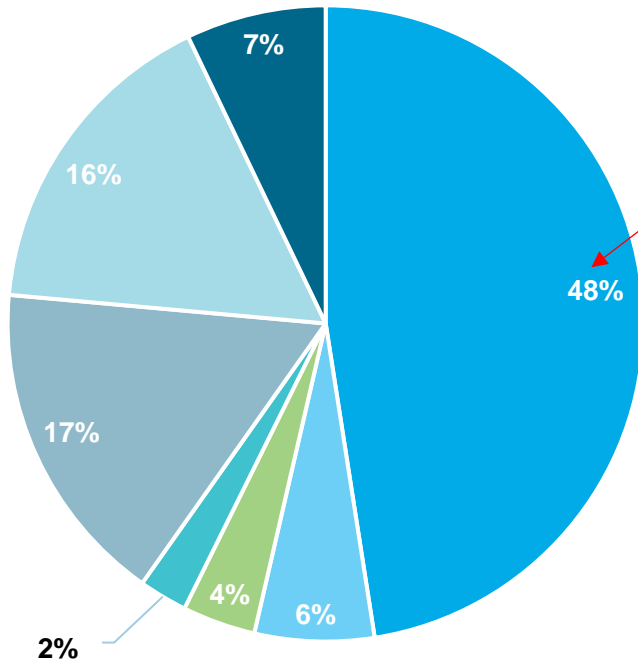
FY 2024 Preliminary Actuals



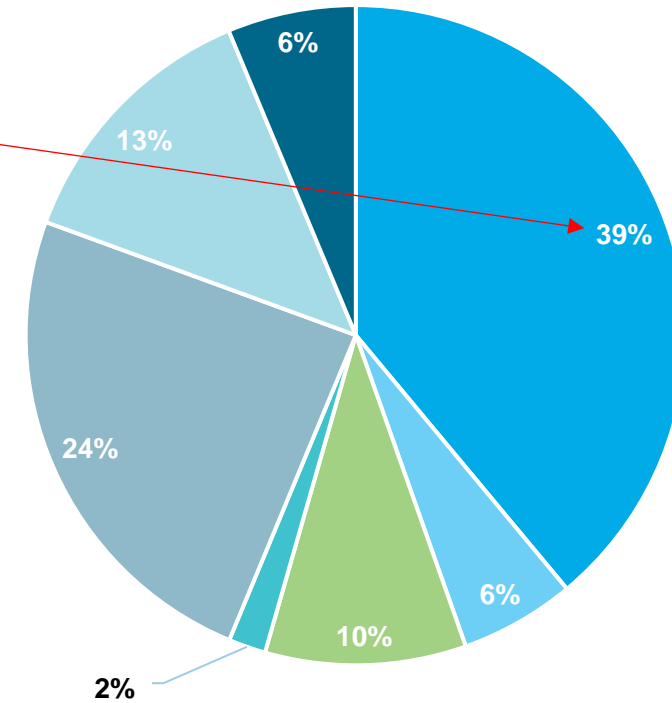
- Electricity
- Gas
- Water
- Sewer
- **Chemicals**
- WW Sludge
- Water Alum Sludge

Electricity – Executive Summary

FY 2020 Actuals



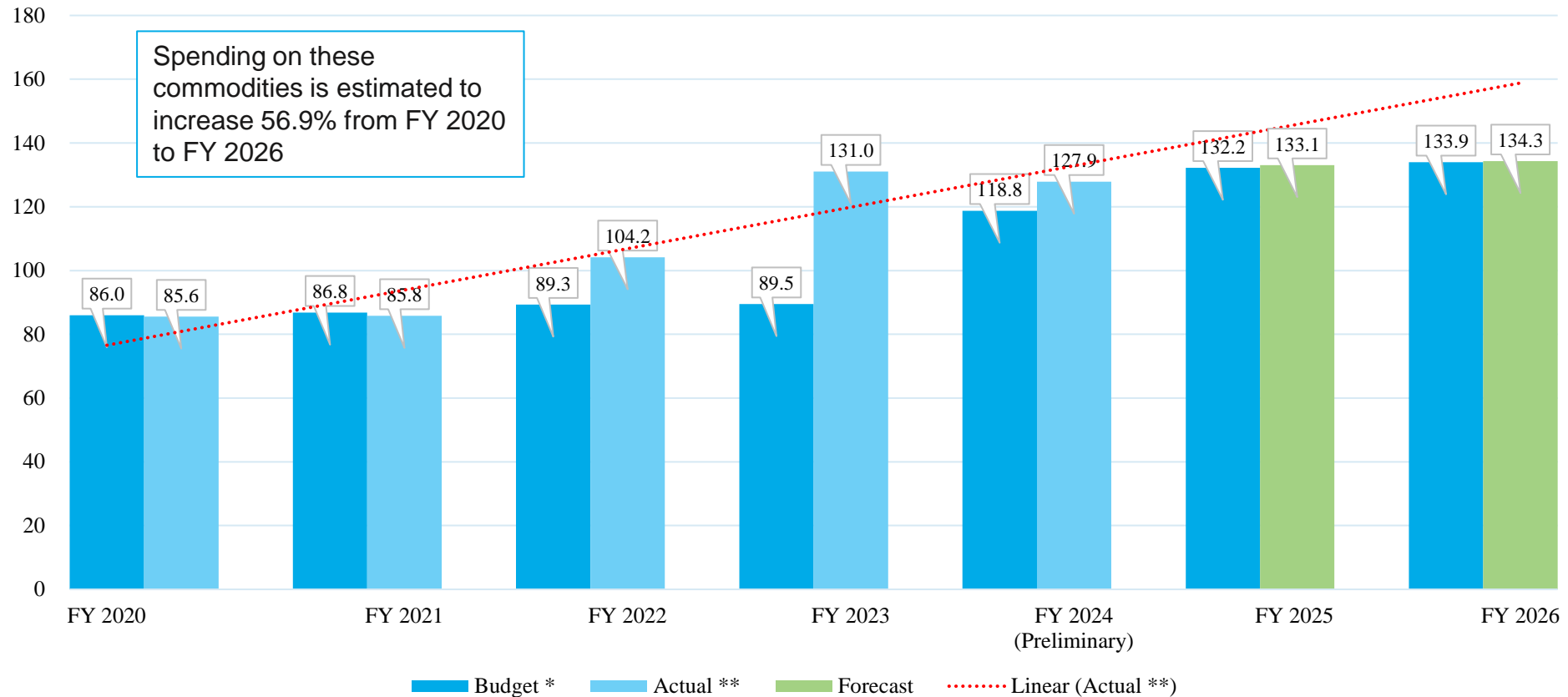
FY 2024 Preliminary Actuals



- Electricity
- Gas
- Water
- Sewer
- Chemicals
- WW Sludge
- Water Alum Sludge

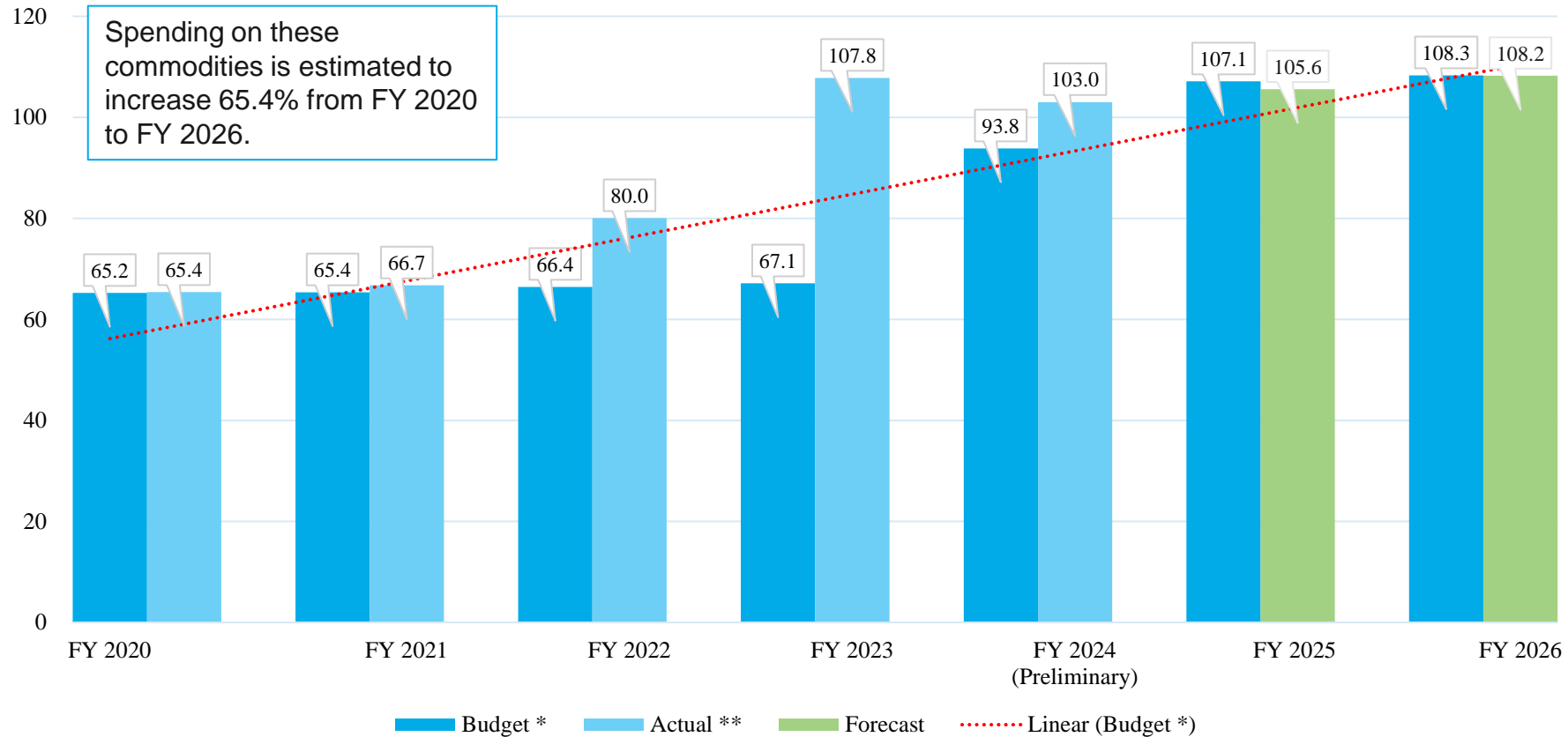
Commodities – Executive Summary

Annual System Wide Commodity (including Sludge Disposal)
Costs - \$ millions



Commodities – Executive Summary

Annual System Wide Commodity (excluding Sludge Disposal)
Costs - \$ millions



Commodities – Executive Summary

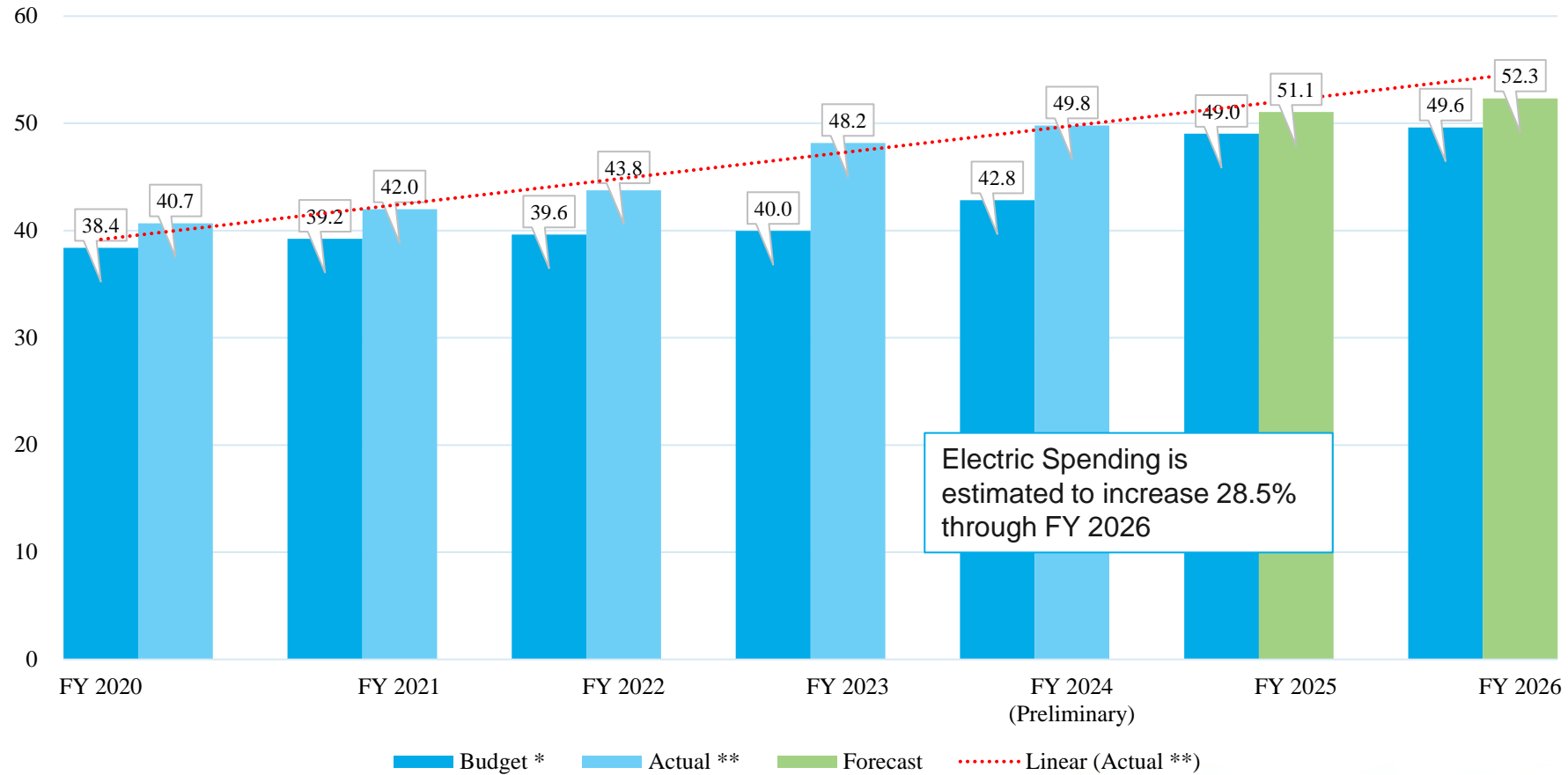
- ◆ Excluding the sludge disposal items, “commodities” have historically only reflected roughly 8% of the total GLWA revenue requirement
 - ◆ Meaning that only ~ 8% of the GLWA total revenue requirement is impacted based on how much water we produce and deliver and how much wastewater we collect, treat and dispose of
- ◆ During FY 2023 this ratio increased to 12.5%, and over 15% when the sludge disposal amounts are included
- ◆ Based on Preliminary FY 2024 results the ratios are 11.8% and 14.7% when including sludge disposal



Electric Usage and Costs

Electric – Executive Summary

Annual System Wide Electricity Costs - \$ millions

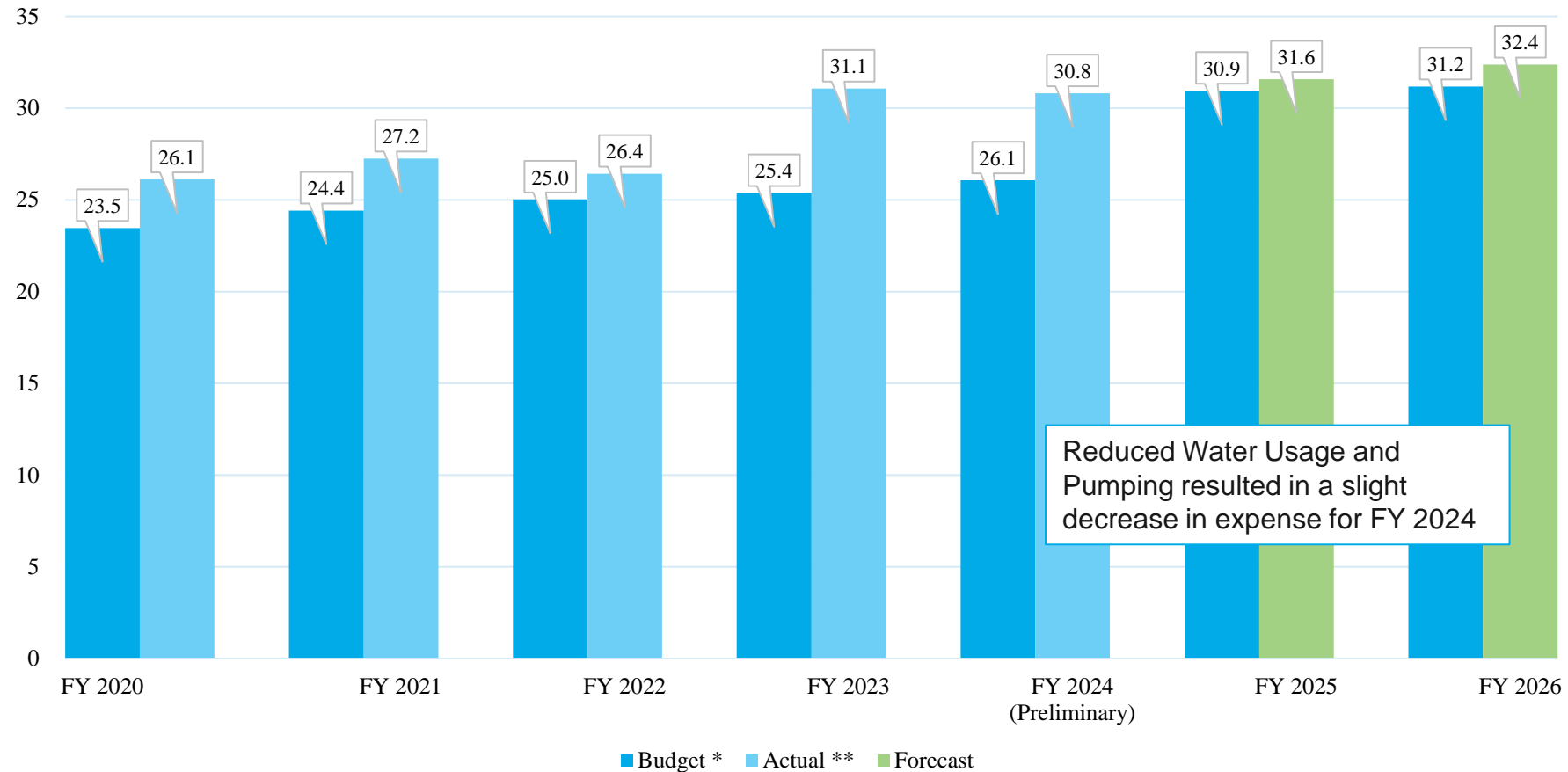


Water System – Electricity Usage

- ◆ Electrical usage is primarily associated with water distribution
- ◆ Peak production season (summer) results in higher electrical usage at the Water Treatment Plants (WTPs) and Pump Stations (Treated Water Transmission System)
- ◆ Cost per kWh has steadily increased since FY 2020 from \$0.079 per kWh to \$0.095 per kWh, a roughly 20.2% increase
- ◆ Based on a review of budget-to-actual data, it appears that budgeted expenses for power costs have fallen short of actual expenses for the last five fiscal years. This has led to concerns regarding the volatility of power costs and the status quo forecasting approach

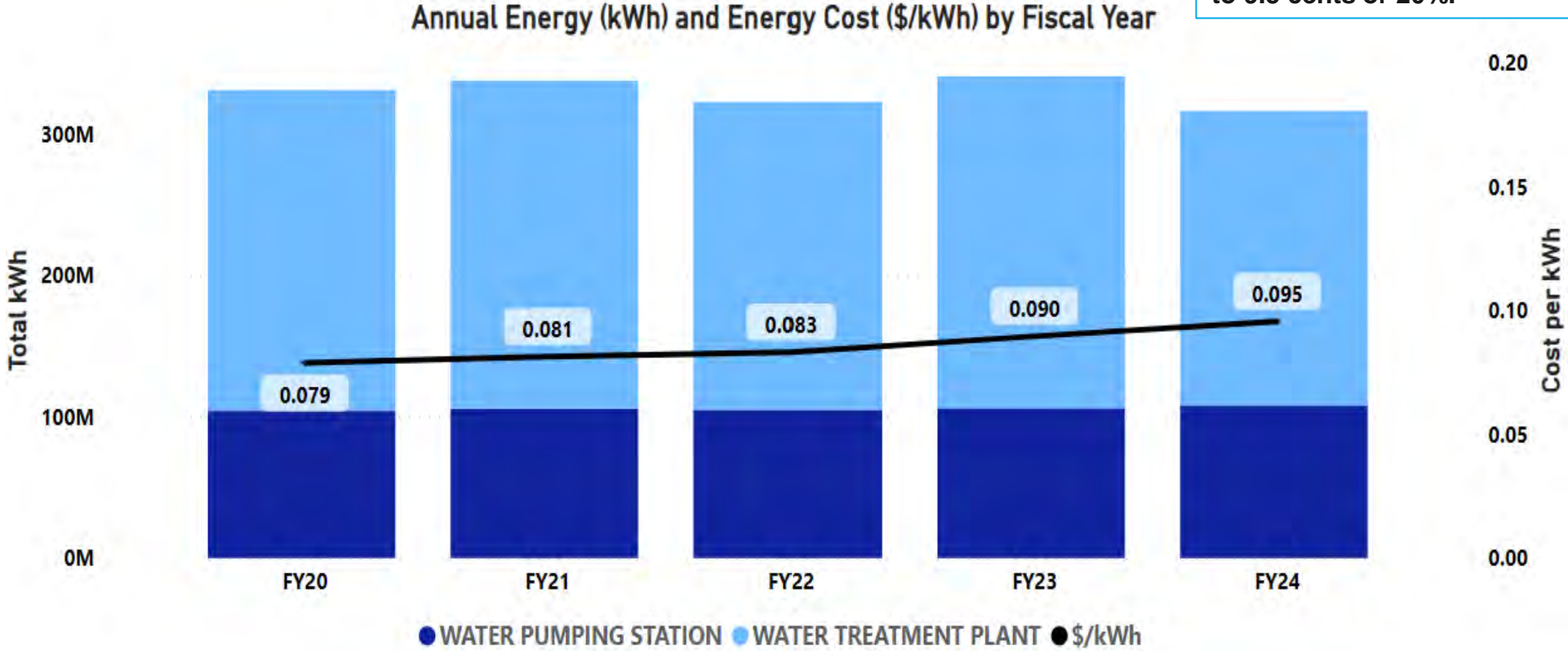
Water System – Adopted Electrical Budget

Annual Water System Electricity Costs - \$ millions

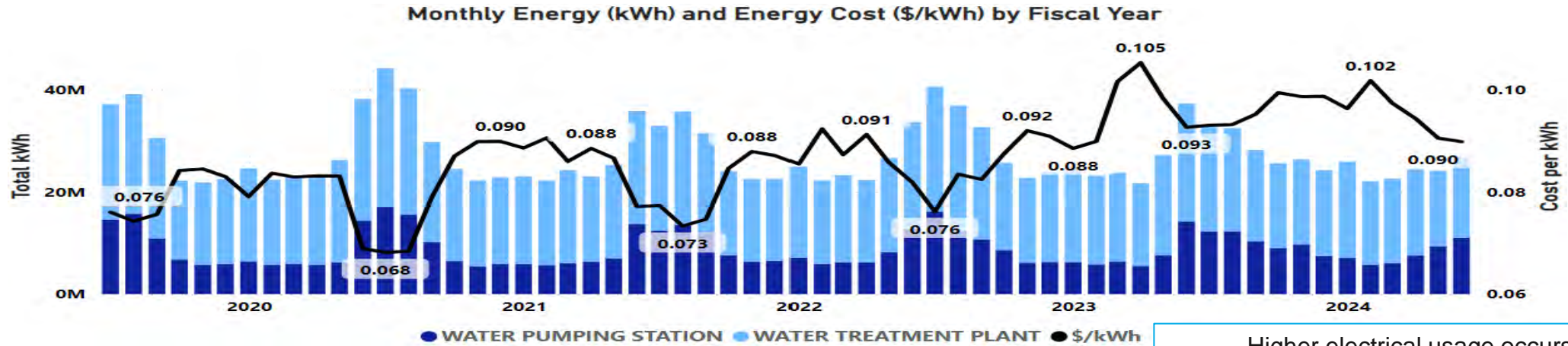


Water System Electric Usage and Unit Cost

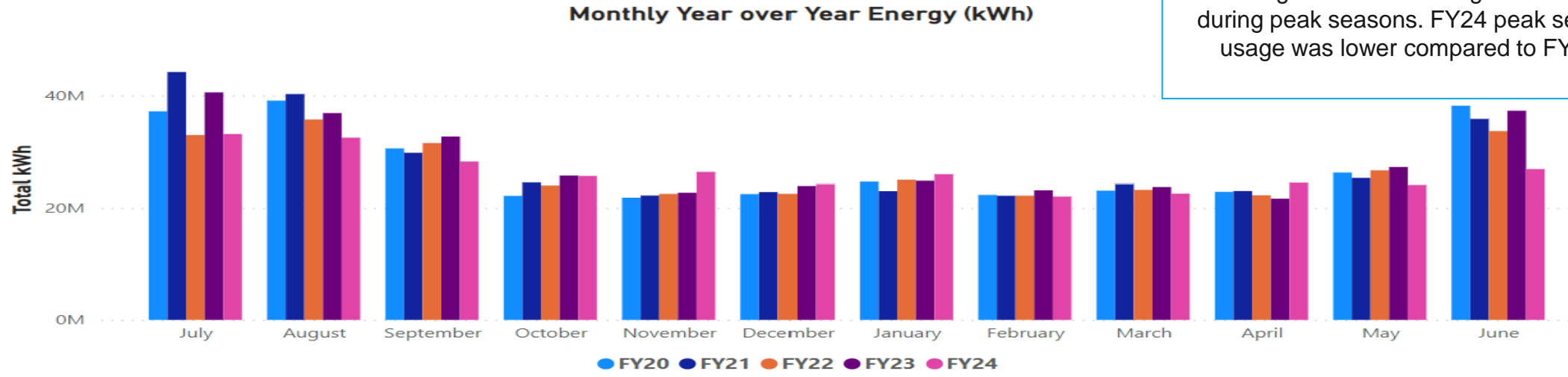
Electrical usage has been stable, but the unit cost has increased from 7.9 cents to 9.5 cents or 20%.



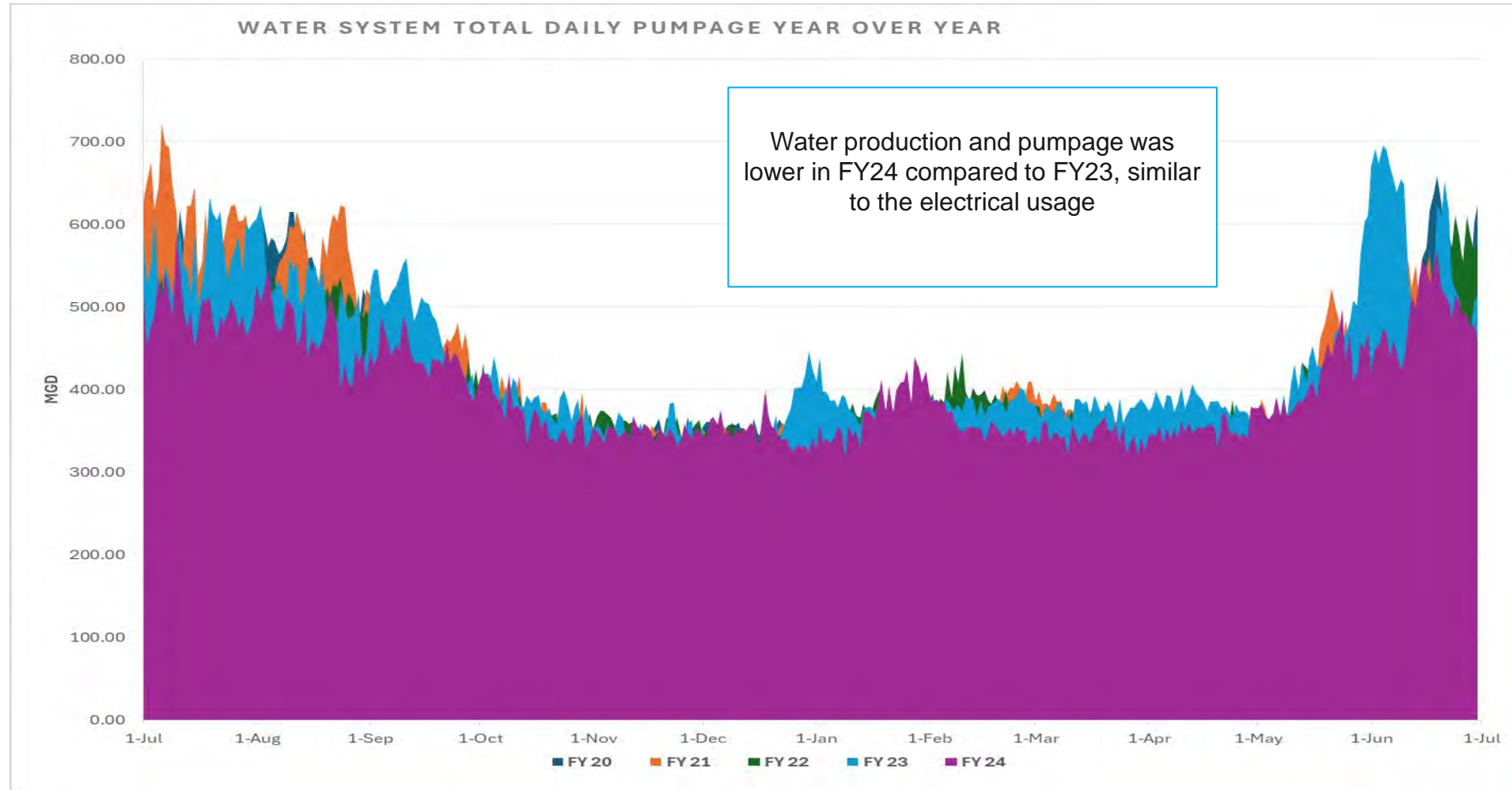
Water System Monthly Electric Usage



Higher electrical usage occurs during peak seasons. FY24 peak season usage was lower compared to FY23.

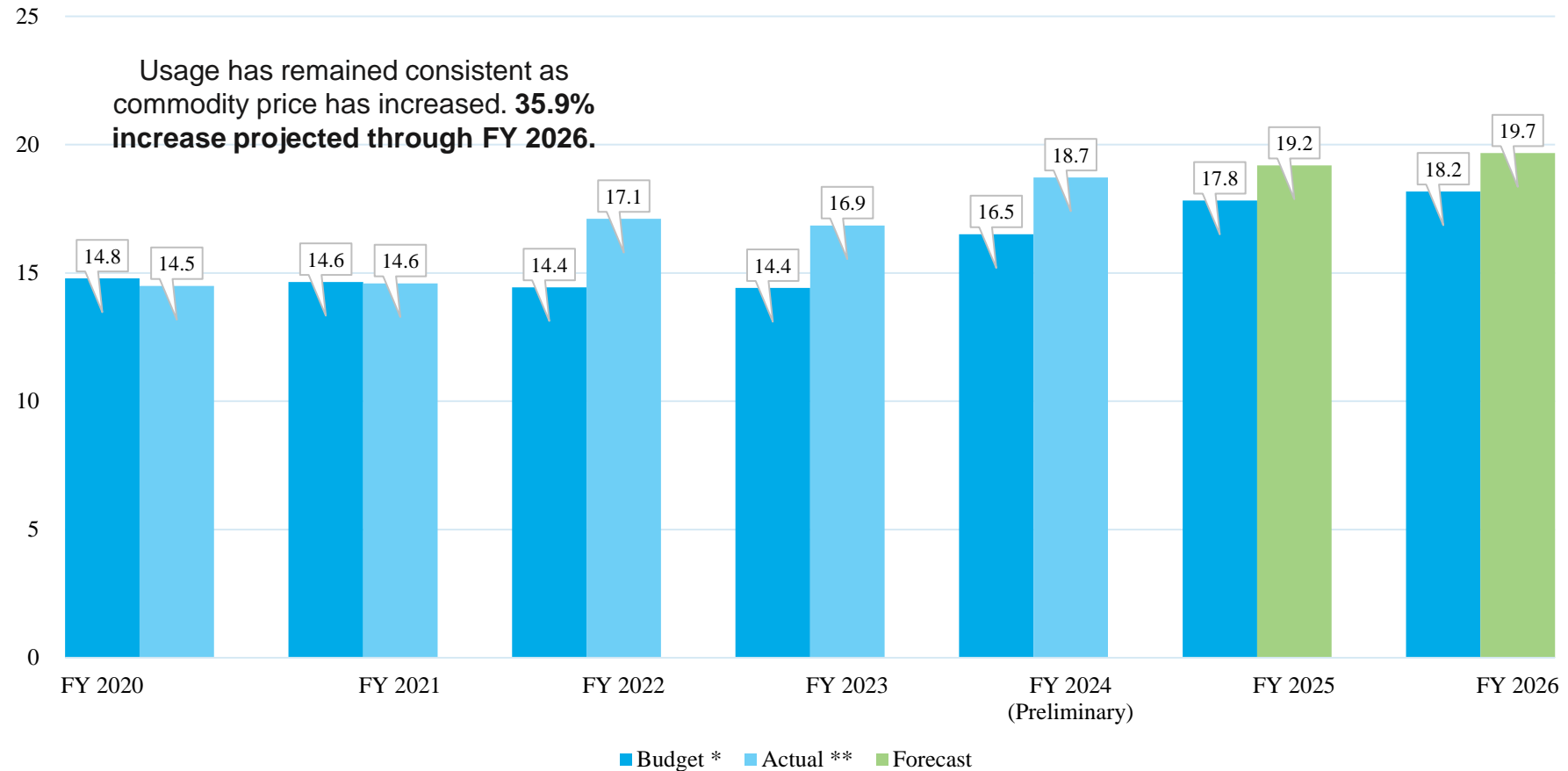


Water System Total Daily Pumpage Year Over Year



Wastewater– Adopted Electrical Budget

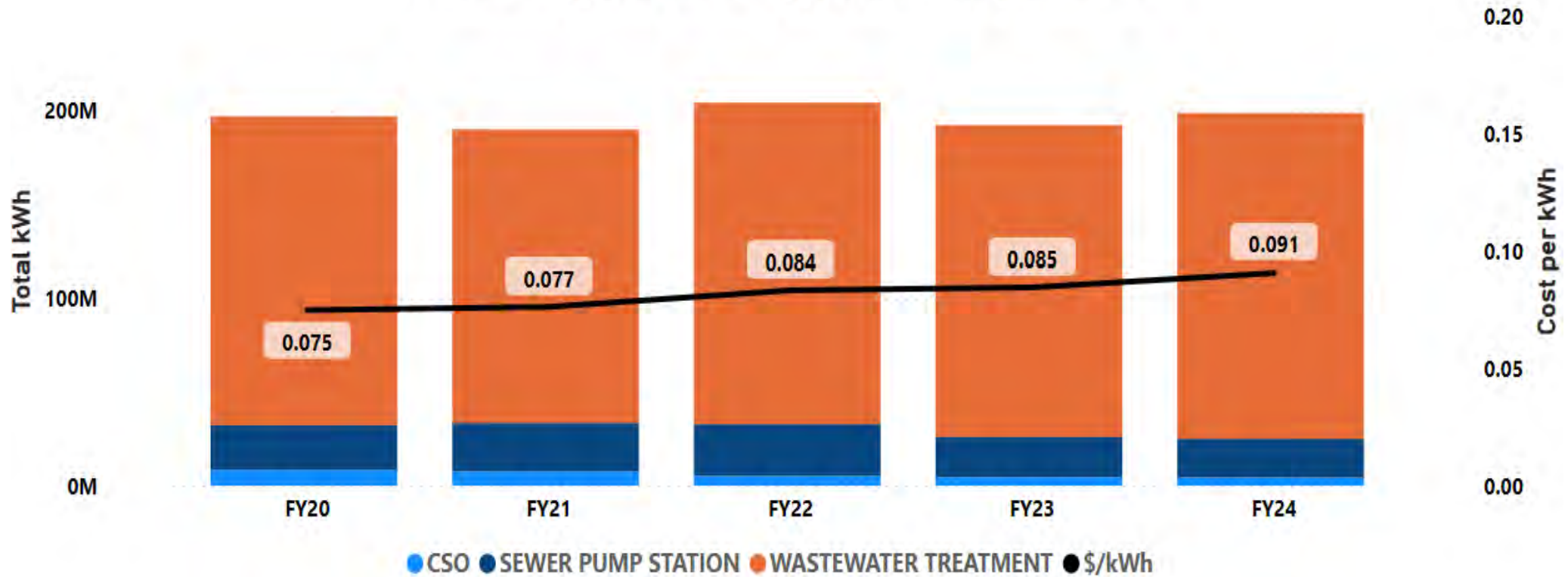
Annual Wastewater System Electricity Costs - \$ millions



Wastewater Electric Usage and Unit Cost

Wastewater electrical usage has been stable, but the unit cost has increased from 7.5 cents to 9.1 cents or 20%.

Annual Energy (kWh) and Energy Cost (\$/kWh) by Fiscal Year



Wastewater System Electrical Summary

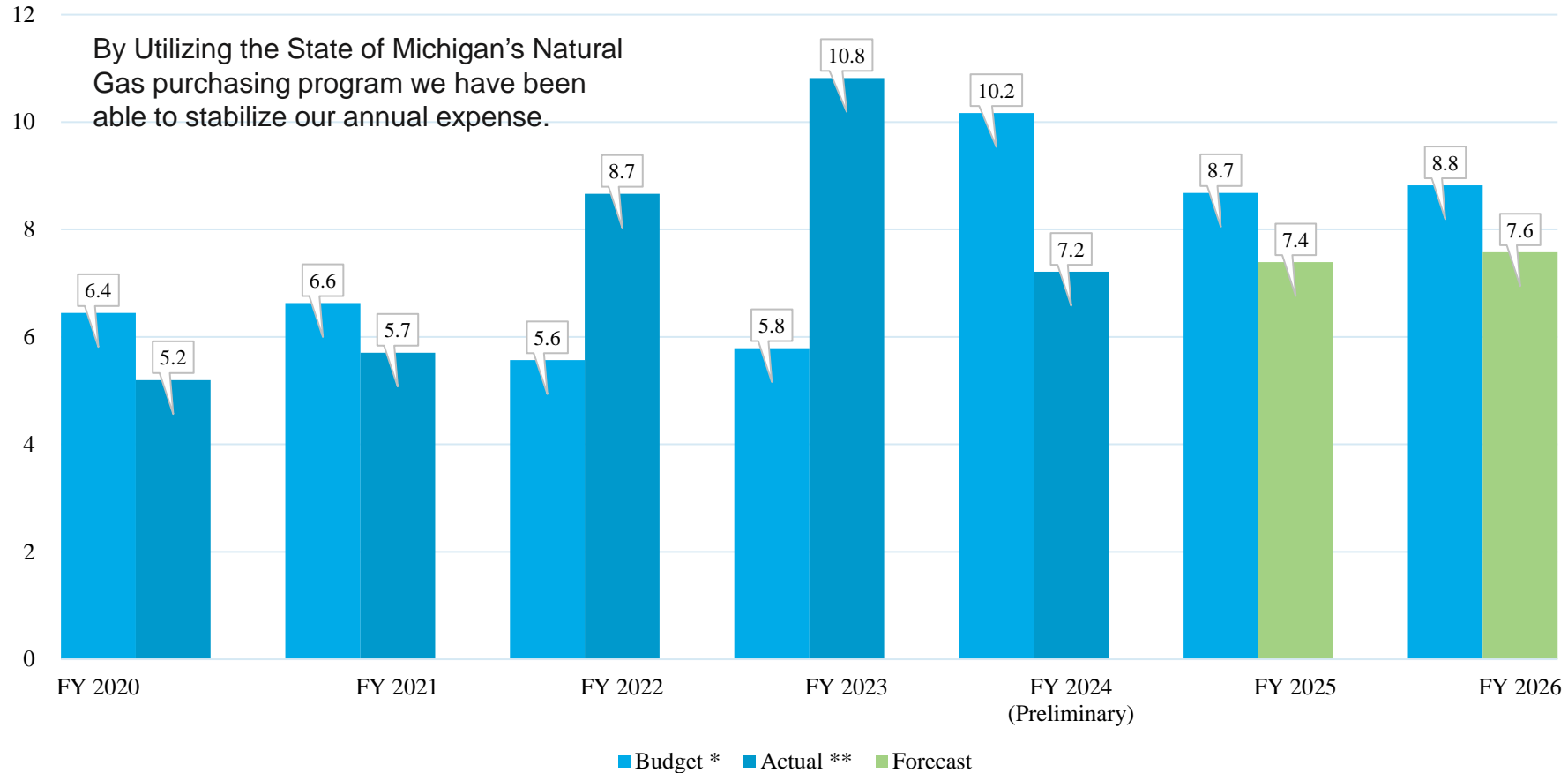
- 💧 Wastewater Electrical usage is more consistent than the water system
- 💧 Cost per kWh has steadily increased since FY 2020 from \$0.075 per kWh to \$0.091 per kWh, a roughly 21.3% increase
- 💧 While the electrical budget and usage have remained consistent, cost per kWh has increased substantially. Additional increases as seen in FY 2024 and FY 2025 will be needed



Natural Gas Usage and Costs

Natural Gas – Executive Summary

Annual System Wide Natural Gas Costs - \$ millions

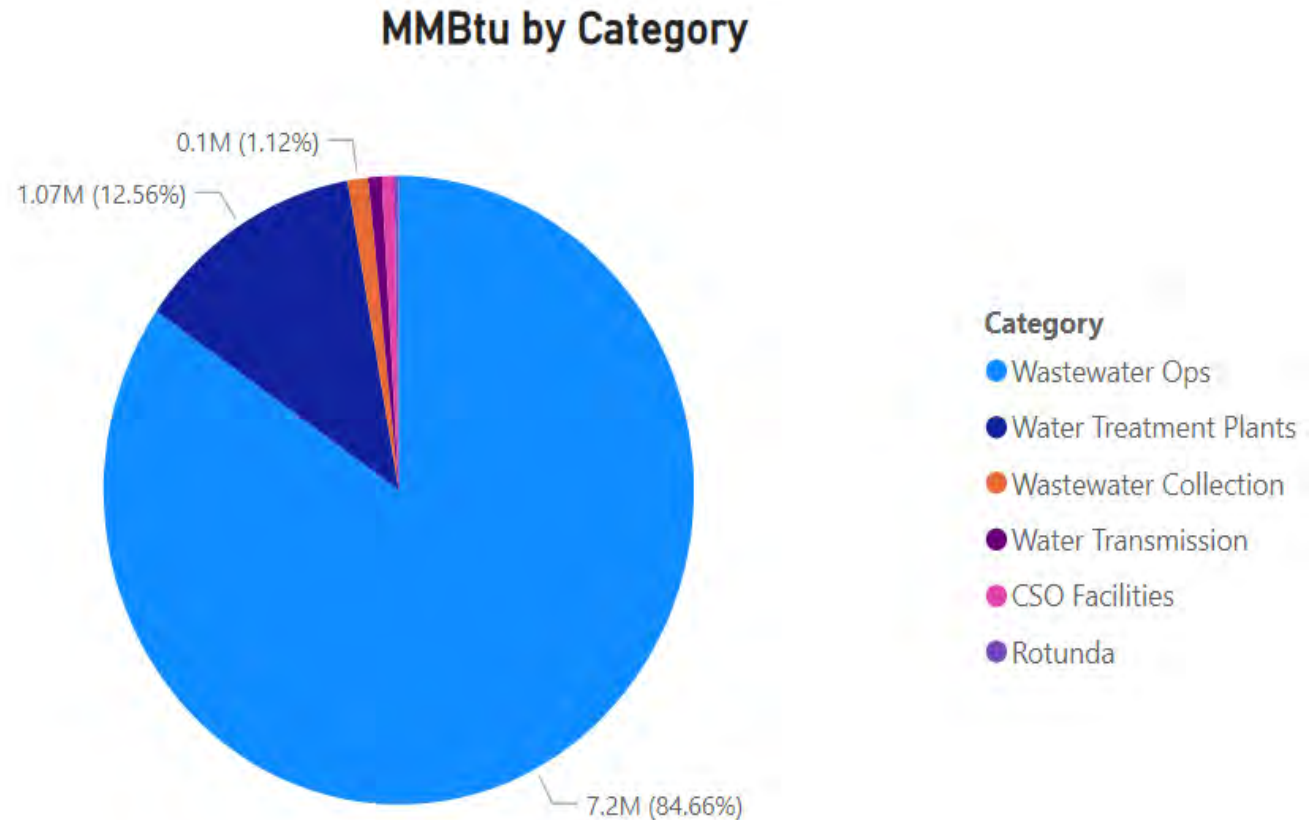


System Wide – Natural Gas Usage

- 💧 GLWA has negotiated and locked in gas pricing for fixed periods (1 – 2 years), minimizing the effect of market volatility
- 💧 80% of anticipated volume for FY 2025 has been locked in at an average rate of \$3.00 per mmBTU, \$.04 lower than the rate locked in for FY 2024
- 💧 GLWA can effectively estimate anticipated annual volume due to the majority of usage being process driven and consistent year over year

Natural Gas Usage

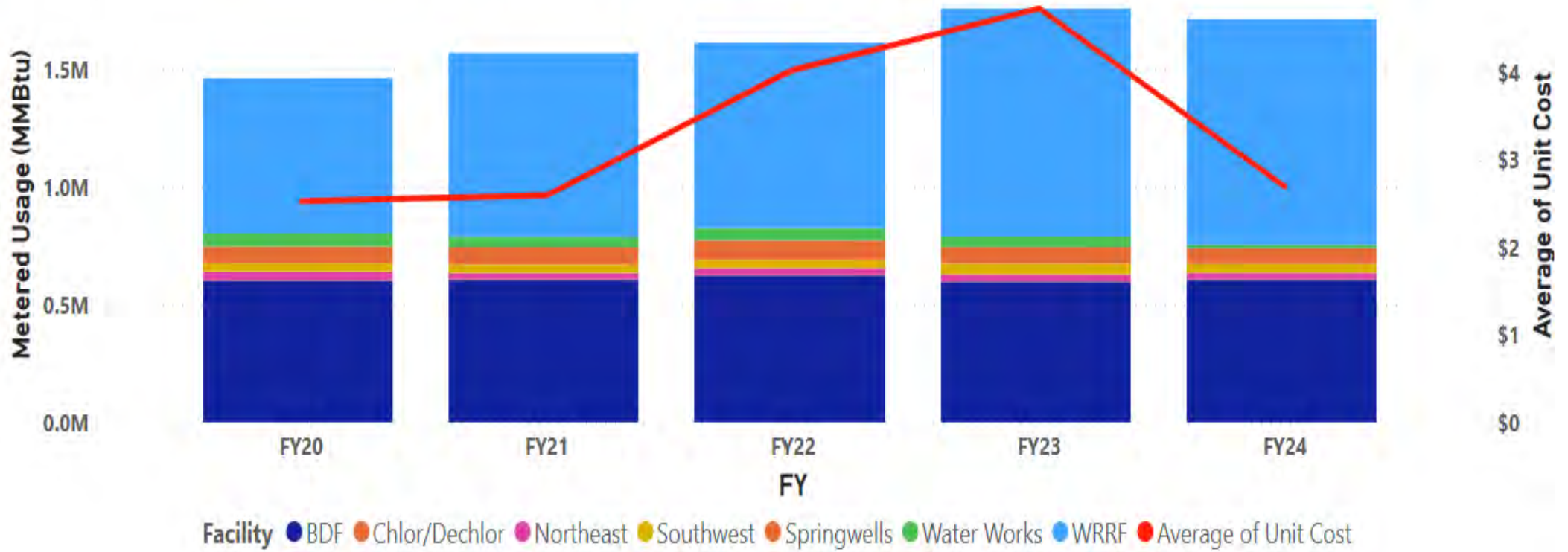
- 💧 Pie Chart represents Natural Gas usage by location type from FY 2019 thru FY 2024
- 💧 Wastewater Operations accounts for 85% of GLWA's natural gas usage (Process Use)
- 💧 Water Treatment Plants account for 12.5% (Heating)
- 💧 Average Natural gas unit cost for FY 2024 was \$3.90 per mmBTU



Natural Gas Usage and Unit Cost

Metered Usage and State Billed Usage with Cost per Unit

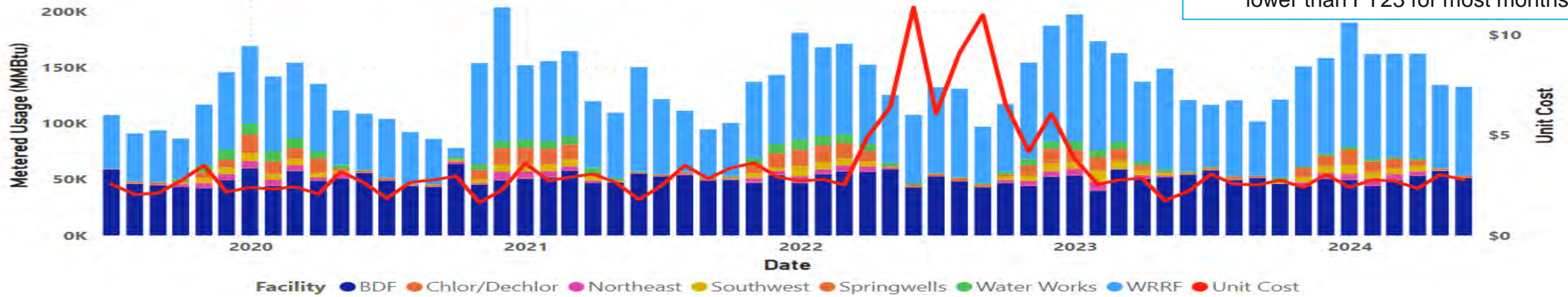
Unit cost was higher for FY22 and FY23, but decreased in FY24 due to locked in pricing.



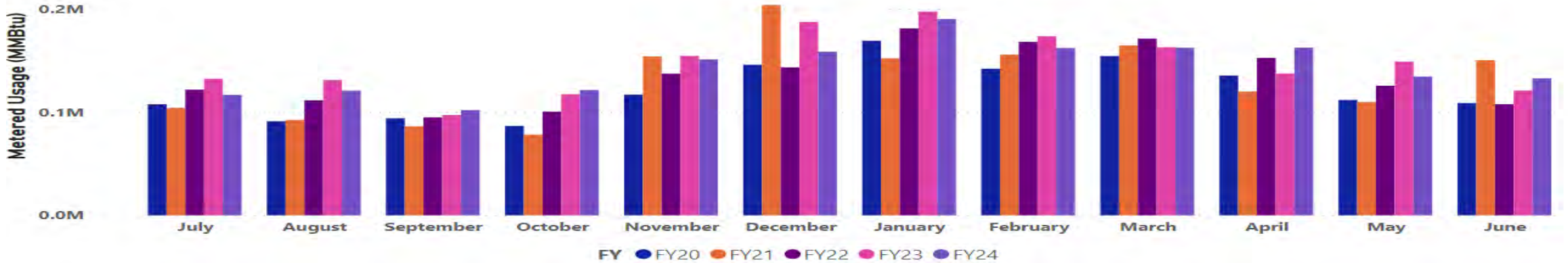
Natural Gas Monthly Usage (MMBtu)

Most of the natural gas usage is by WRRF & BDF. Natural gas usage in FY 24 was lower than FY23 for most months.

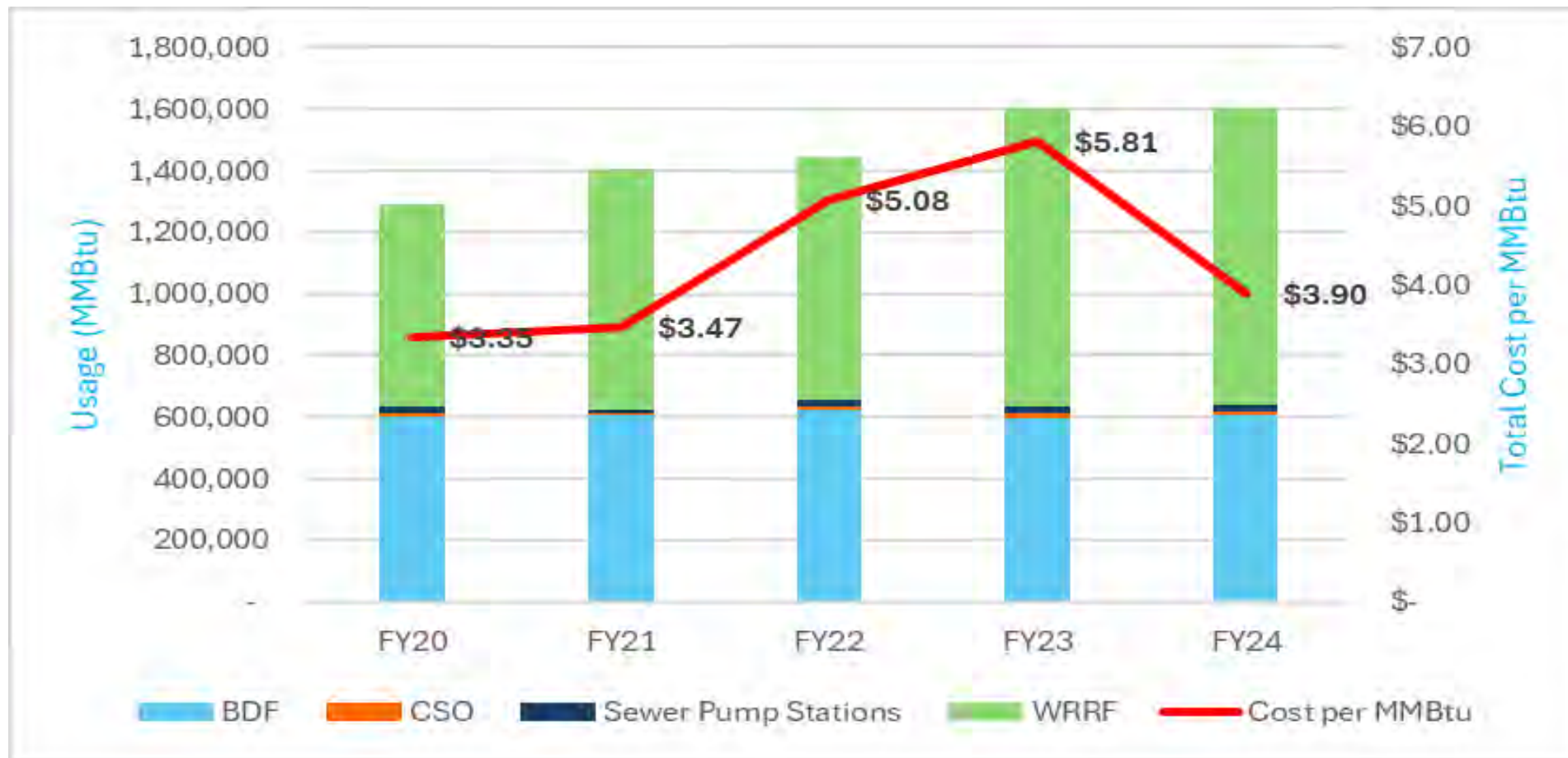
Metered Usage and State Billed Usage with Cost per Unit



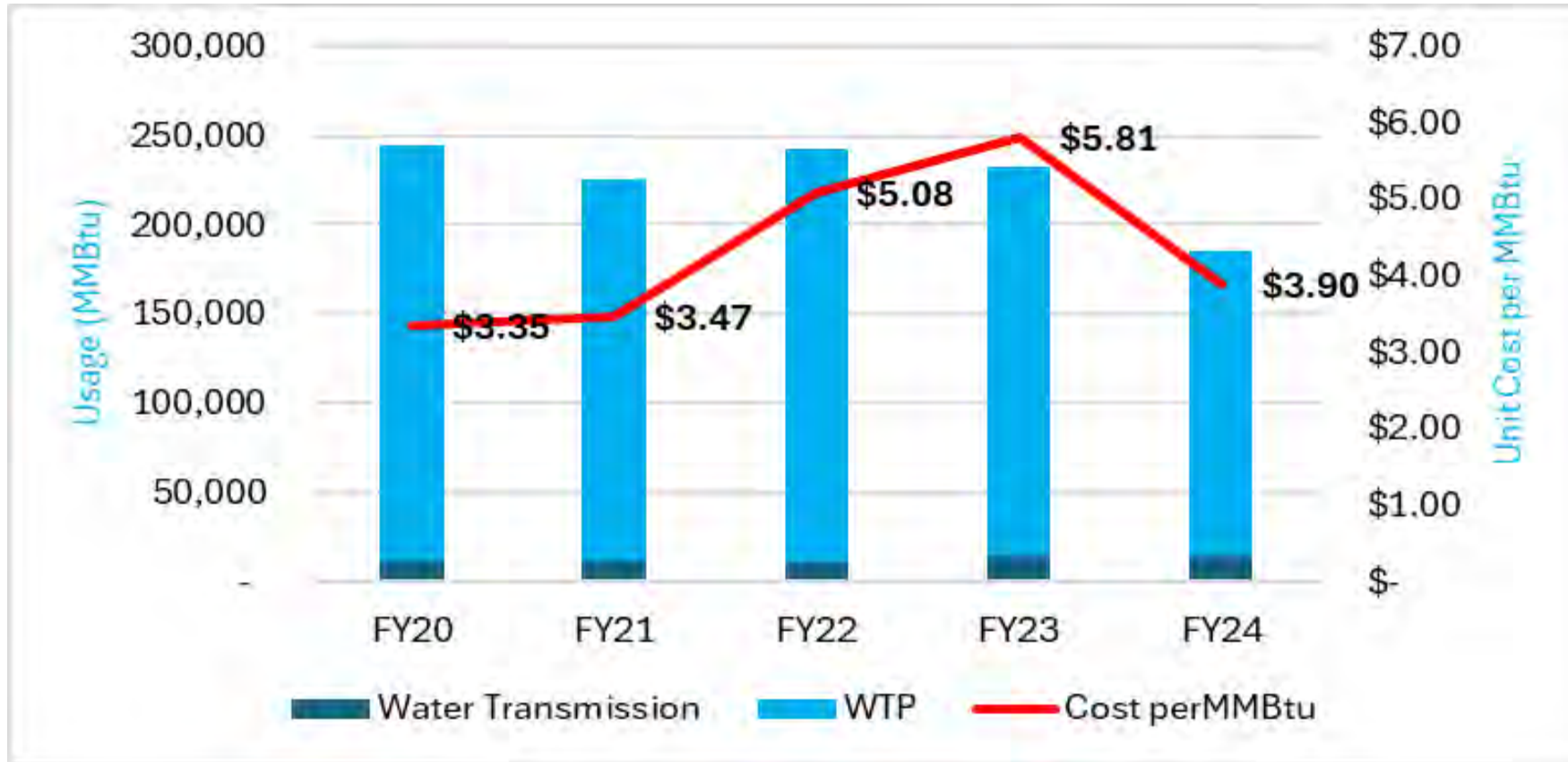
Monthly Year over Year Usage (MMBtu)



Wastewater System – Natural Gas Usage & Unit Cost



Water System – Natural Gas Usage & Unit Cost

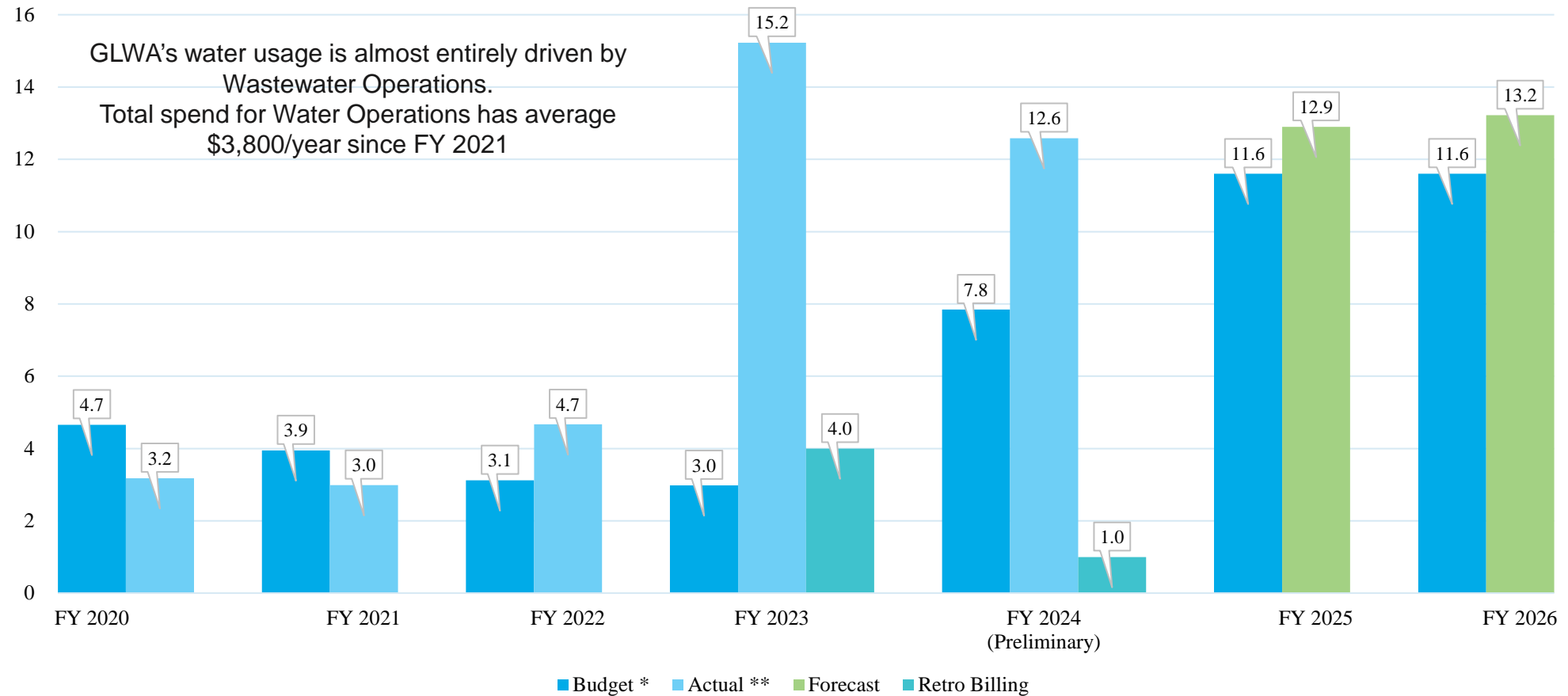




Water Usage and Costs

Water – Executive Summary

Annual System Wide Purchased Water Costs - \$ millions



System Wide – Water Usage

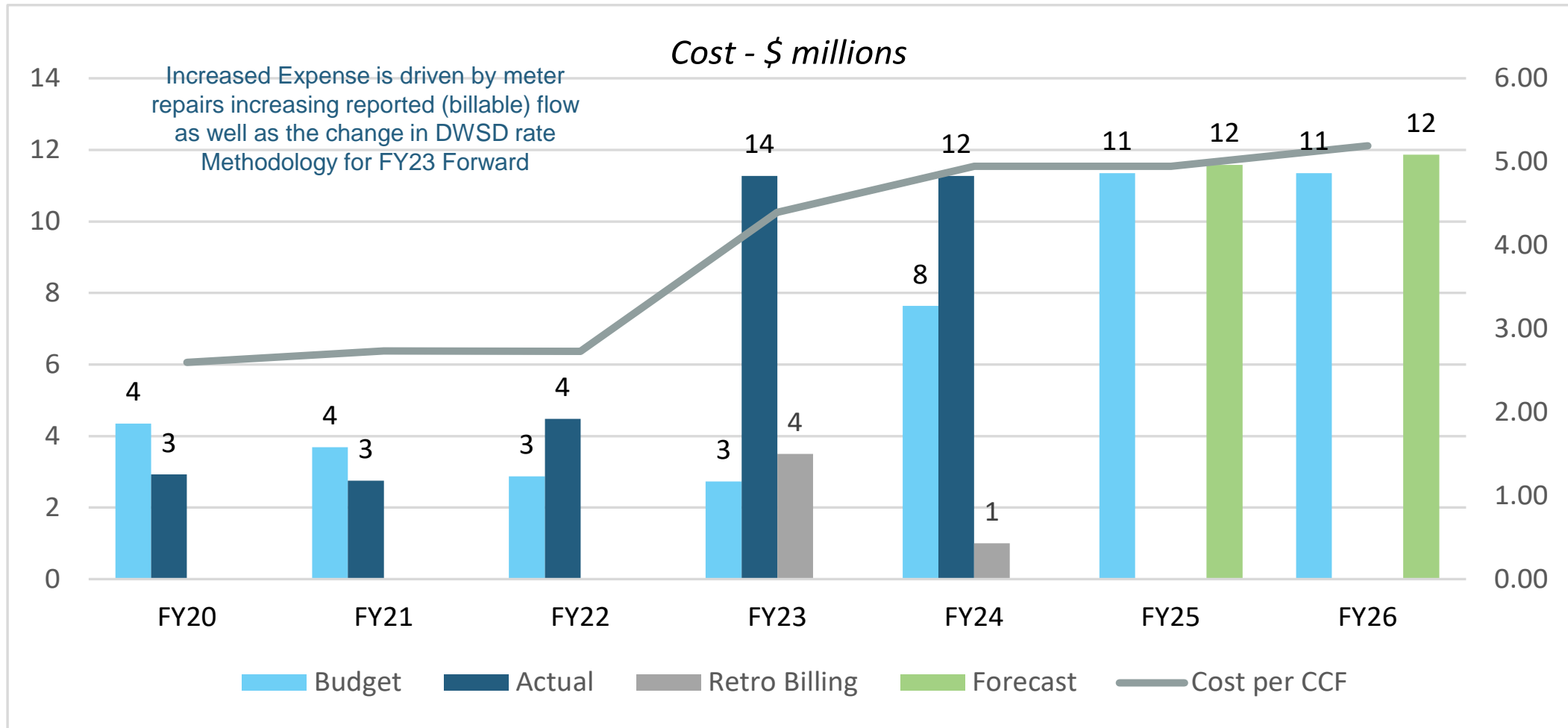
- 💧 GLWA has recognized the need for accurate flow metering, both on water provided and water consumed
- 💧 Since FY 2021 GLWA has been working with DWSD to resolve metering issues for all facilities serviced
- 💧 Meters have been replaced at the Chlorination/De-chlorination facility and WRRF to ensure correct reads and billing
- 💧 GLWA is currently working through a review of all water/sewer connections for facilities in the city of Detroit to ensure accurate billing and metering

DWSD Rate Change - Water Unit Cost

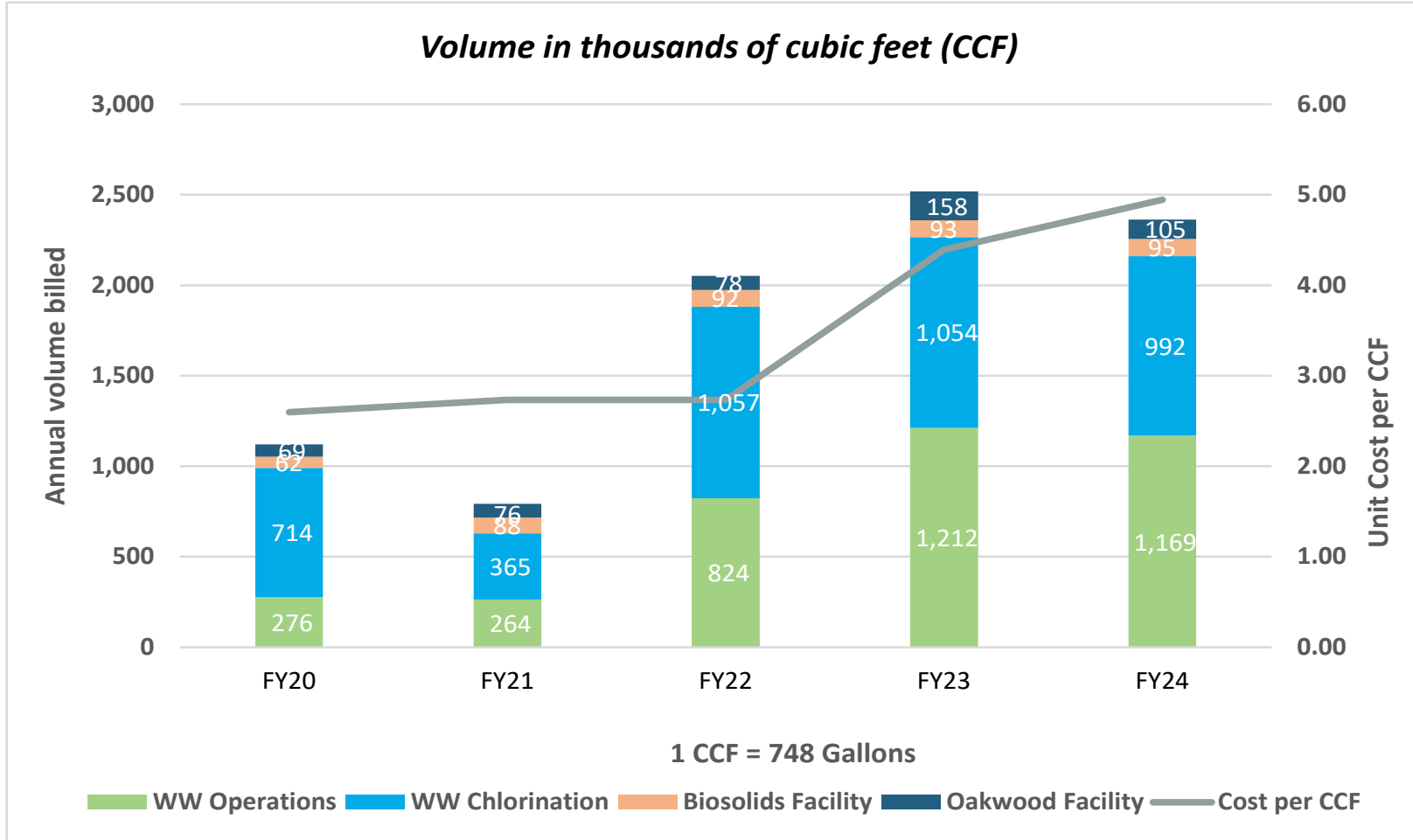
Month	Dechlor Volume (CCF)	Cost	WRRF Volume (CCF)	Cost	Total Cost	Unit Cost (\$/CCF)
July 2022	76,895	\$ 204,540.70	94,059	\$ 250,196.94	\$ 454,737.64	\$ 2.660
August 2022	93,388	\$ 419,463.10	112,010	\$ 503,113.12	\$ 922,576.22	\$ 4.491
September 2022	81,041	\$ 363,955.32	100,805	\$ 452,735.20	\$ 816,690.52	\$ 4.491
October 2022	97,912	\$ 439,739.85	121,041	\$ 543,635.32	\$ 983,375.16	\$ 4.491
November 2022	84,193	\$ 378,114.10	100,152	\$ 449,801.93	\$ 827,916.03	\$ 4.491
December 2022	88,348	\$ 396,778.36	103,734	\$ 465,892.27	\$ 862,670.63	\$ 4.491

- 💧 Chlor/Dechlor & WRRF use a tremendous amount of process water
 - 💧 Over 6,000 CCF per day (4.5 MGD)
- 💧 Average unit cost (\$/CCF) increased from \$2.66 to \$4.491
 - 💧 Increase of 69%
 - 💧 FY 2025 Rate is \$4.78 an increase of 79.7% since FY 2022
- 💧 Monthly *increase* of approximate \$350,000
 - 💧 \$4.2M Annual Increase

Wastewater – Adopted Water Budget



Wastewater – Water Volume Change



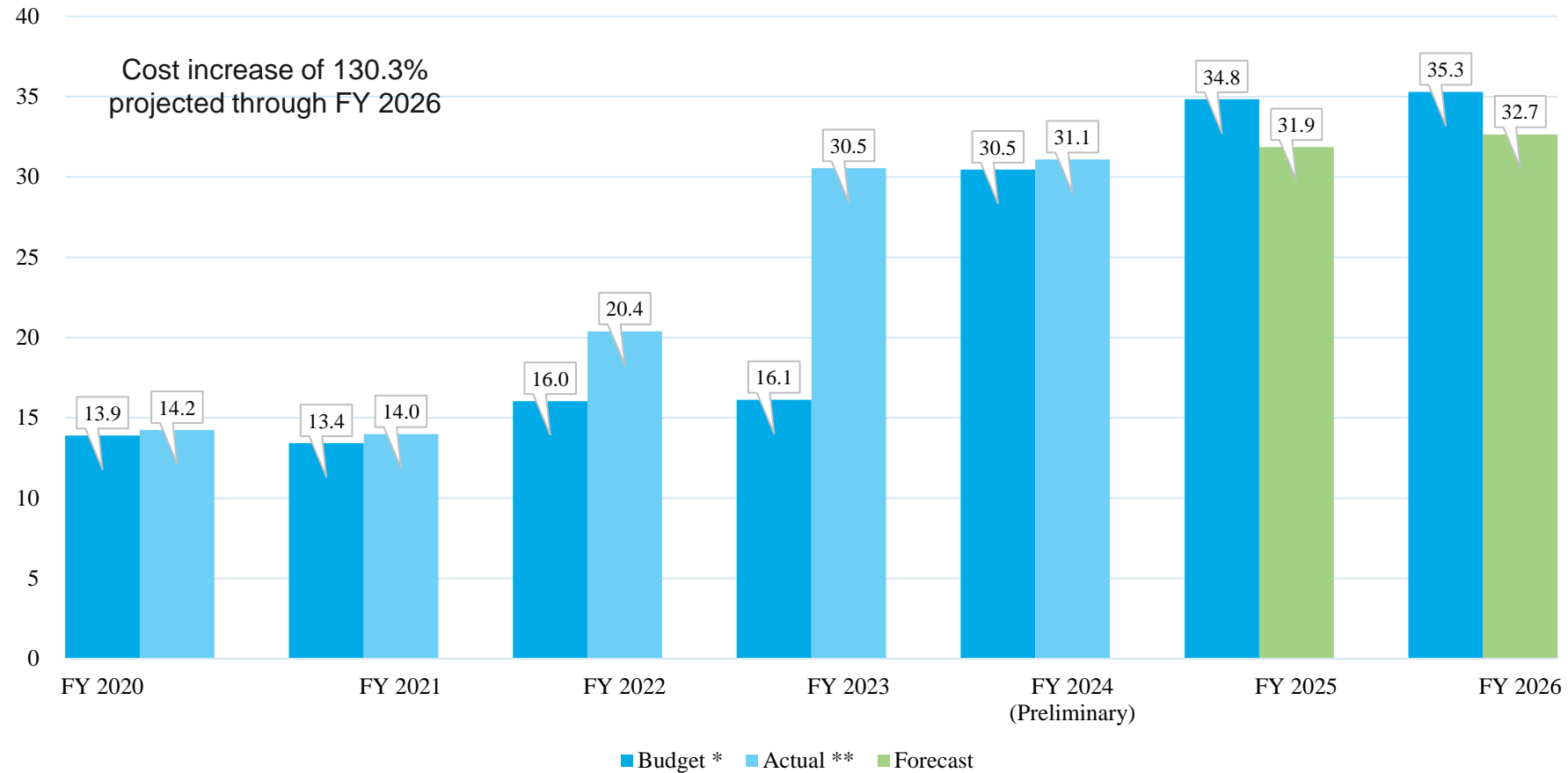
Wastewater volume changes due to meter repairs plus the impact of commodity cost change



Chemical Usage and Costs

Chemical – Executive Summary

Annual System Wide Chemical Costs - \$ millions



Changes That Will Affect FY 2025 and Beyond

- ◆ Beginning in January 2025 new Federal Lead & Copper Rule Revisions (LCRR) will require budget amendments for the current fiscal year and increases to the budgets presented in the following slides
 - ◆ These changes will affect all water plant budgets and wastewater budget at the Water Resource Recovery Facility for primary processing
 - ◆ The budget increases are forecast to be significant
 - ◆ Water plants chemical budgets for orthophosphate may increase as much as \$4.7 million (36%)
 - ◆ Wastewater chemical budget for ferric chloride may increase as much as \$2.8 million (59%)
 - ◆ Additional considerations were outlined in a presentation to the GLWA Board of Directors on February 28, 2024, and noted on the following slide

Implementation Considerations



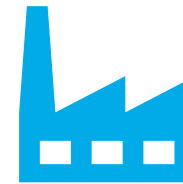
Capacity limitations of our existing chemical feed systems



Chemical supply chain concerns



Water quality parameter (WQP) monitoring results at the points of entry and throughout the distribution systems



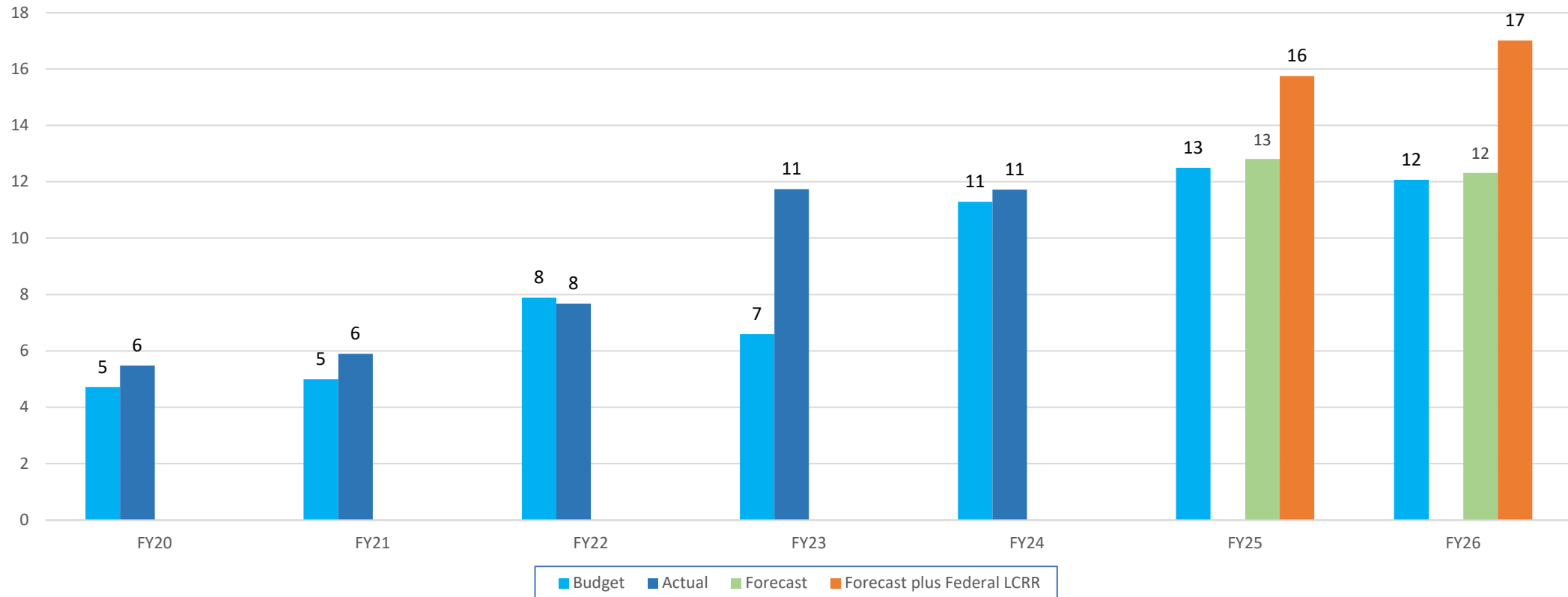
Increased phosphorus loading at the Water Resource Recovery Facility (WRRF)



Customer feedback

Water System – Adopted Chemical Budget

Costs - \$ millions



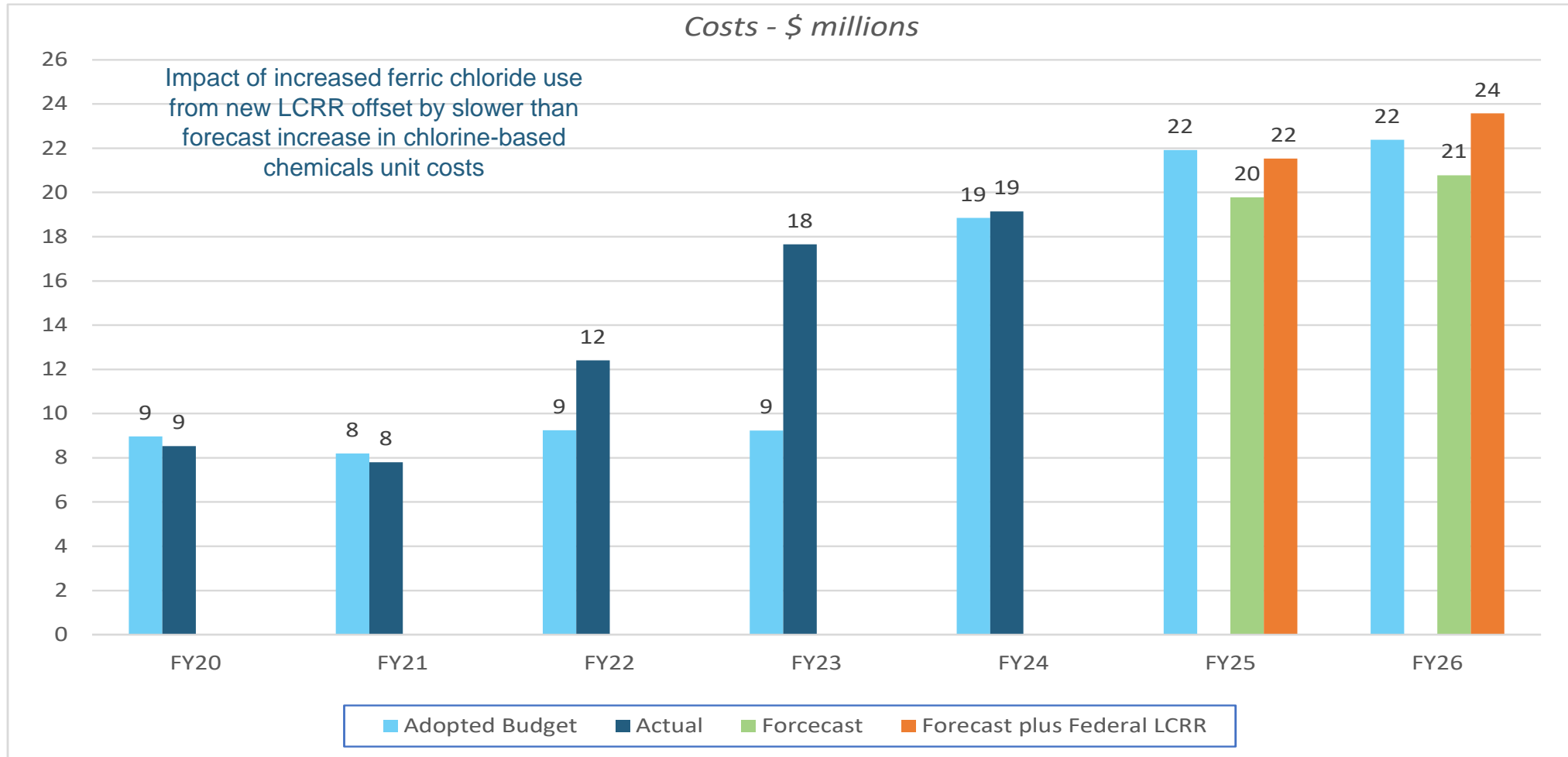
Water Chemical Summary

- ◆ As shown in the graph on the previous page, expenditures for chemicals used in water treatment were relatively stable through FY 2021. Beginning that year and into FY 2022 & FY 2023 costs increased significantly. In FY 2024 prices have appeared to stabilize. Below are examples of significant increases experienced from FY 2021 to FY 2023.
 - ◆ Chlorine –annual average unit cost increased 372%
 - ◆ Orthophosphate – annual average unit cost increased 103%
 - ◆ Fluoride – annual average unit cost increased 176%
 - ◆ Aluminum Sulfate – annual average unit cost increased 57%

Water Chemical Summary *(continued)*

- ◆ Although chlorine was only 12.1% of the original FY 2023 chemical budget (\$6.6M); the significant increase in cost had the largest impact to this budget category.
- ◆ Three chemicals made up 82% of the adopted \$11.3M FY 2024 Budget; Aluminum Sulfate 35%, Chlorine 24% and Orthophosphate 23%

Wastewater System – Adopted Chemical Budget



Wastewater Chemical Summary

- ◆ As shown in the graph on the previous page, expenditures for chemicals used in wastewater treatment were relatively stable through FY 2021. Beginning that year and into FY 2022 & FY 2023 costs increased significantly. In FY 2024 prices have appeared to stabilize. Below are examples of significant increases experienced from FY 2021 to FY 2023
 - ◆ Chlorine based products – annual average unit cost increased 296%
 - ◆ Oxygen (gaseous & liquid) - annual average unit cost increased 25%*
- ◆ Three chlorine-based chemicals made up 70% of the original FY 2024 chemical budget (Totaling \$13.1M)

Wastewater Chemical Summary *(continued)*

- ◆ The approved FY 2025 budget was based on forecast supply chain constraints impacting chlorine-based chemical pricing. As noted above these constraints have had a smaller impact than what was anticipated. As such the current FY 2025 budget may be adequate to address the impact of the additional LCRR ferric chloride expenditures
- ◆ Recently announced unit cost decreases include Sodium bisulfite 16% and *Oxygen & Nitrogen of 2.5% both effective in July 2024

Wastewater Chemical Summary *(continued)*

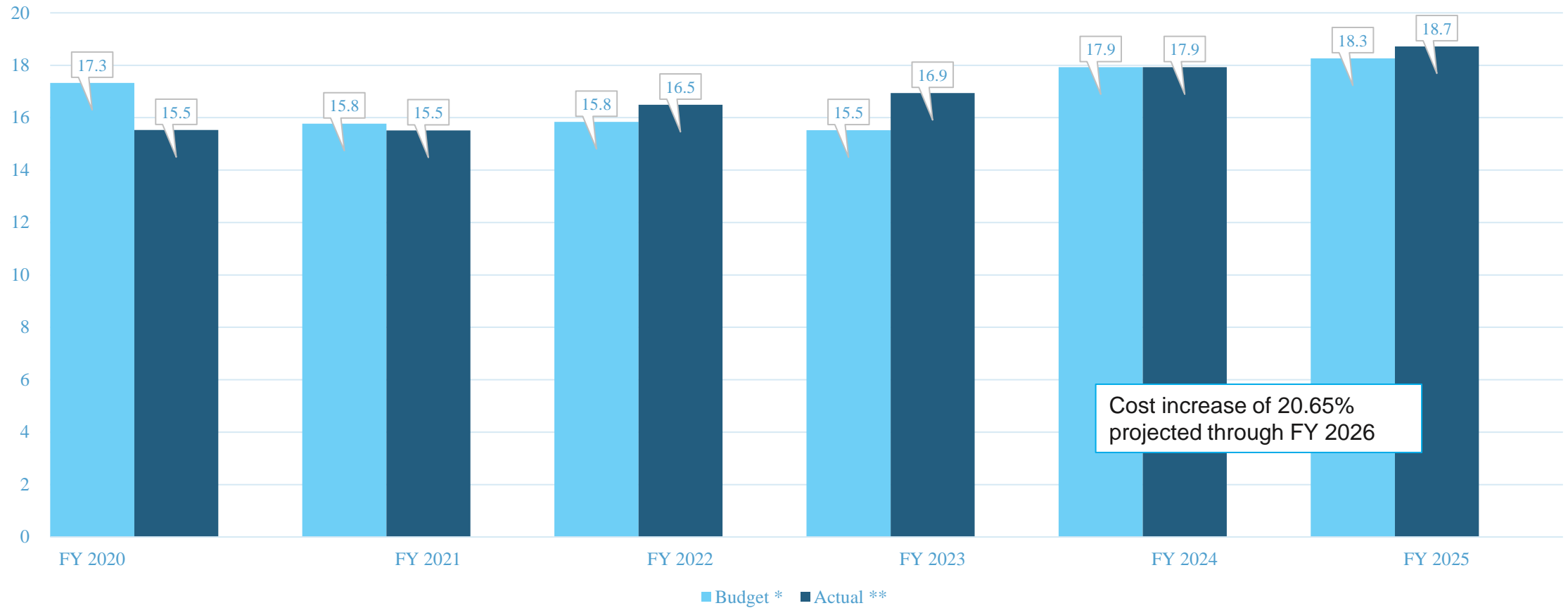
- ◆ Per the US Environmental Protection Agency (USEPA) website; chlorine production capacity in the U.S. experienced an approximate 10% decline (1.2 million tons) in 2021, due primarily to the closure of manufacturing facilities . Recently the USEPA has noted that continue severe weather events as having possible supply chain impacts
- ◆ <https://www.epa.gov/waterutilityresponse/status-chlorine-product-availability-and-pricing>



Biosolids and Sludge Usage and Costs

Biosolids – Executive Summary

Annual System Wide Biosolids Disposal Costs - \$ millions



Wastewater Biosolids Summary

- ◆ GLWA has contracted with the New England Fertilizer Company (NEFCO) to operate the Biosolids Dryer Facility adjacent to the Water Resource Recovery Facility (WRRF) (Contract approved in 2013; became operational in 2015)
- ◆ The current cost is subject to adjustments annually (in March) based on the Consumer Price Index for All Urban Consumers (CPIU) – All Items in Detroit-Warren-Dearborn, MI as published by the U.S. Bureau of Labor Statistics
- ◆ Inflationary impact on the CPIU has caused this adjustment to increase from an average of 2.0% annual increase to an average 7.25% increase in both FY22 and FY23 resulting in an increased cost in excess of \$1.0M in each of these years

Wastewater Biosolids Summary

- ◆ The inflation rate was lower in FY24 resulting in a 2.8% increase, or \$0.4 million

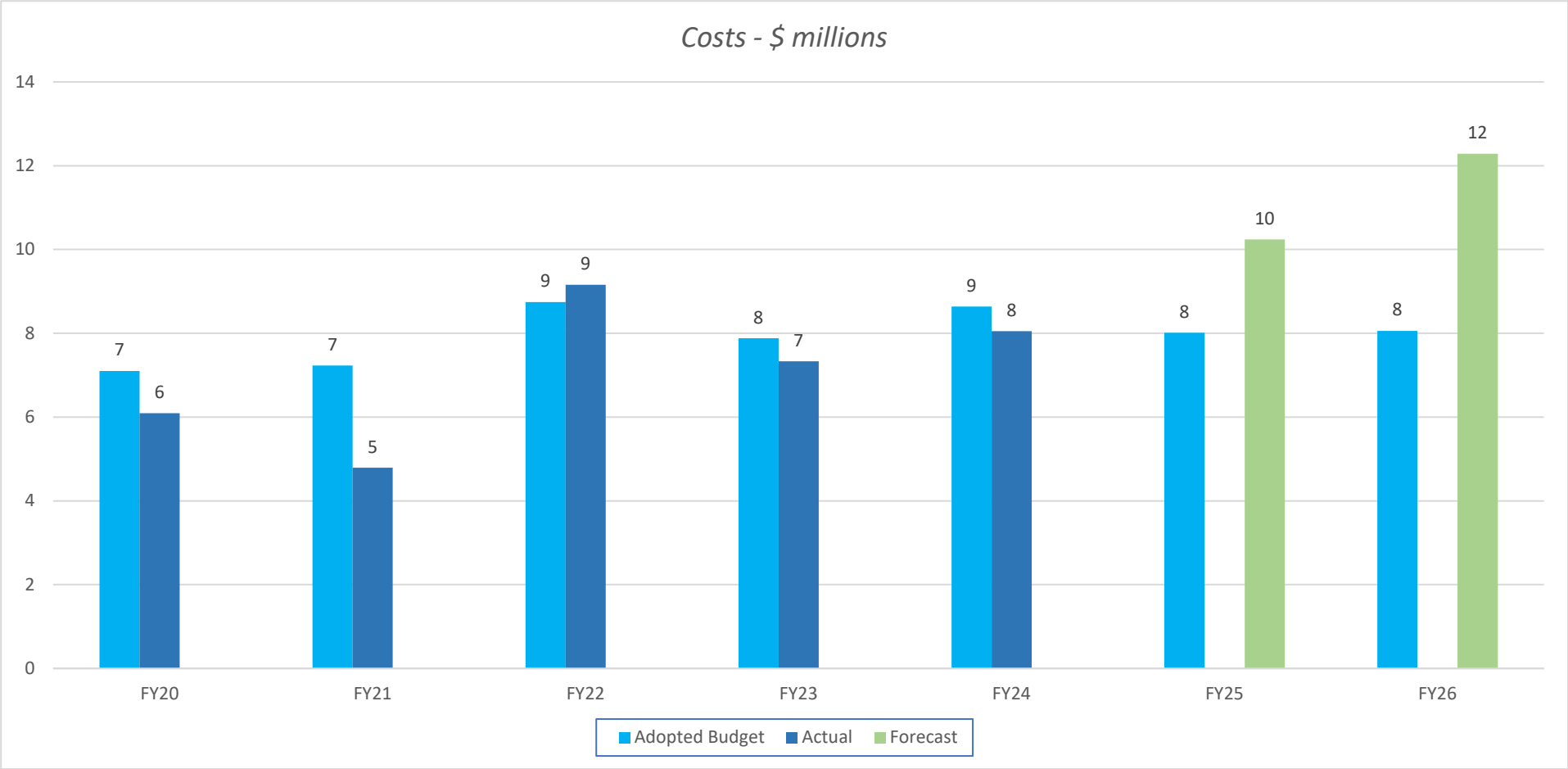
Water Sludge Summary

- ◆ The accumulated sludge is a byproduct of the water treatment process. The treatment process collects the suspended particles (turbidity) and settles within the basins. The sludge is then removed from the basins and is disposed of under the contract of both services
- ◆ Volumes of sludge removal varies from year to year depending on the quality of source waters

Water Sludge Summary

- ◆ The most recent extension of sludge removal and hauling for Springwells, Northeast, and Southwest Water Treatment plants includes a 10.8% increase in cost per ton
- ◆ The Sludge hauling contacts for Water Works Park and Southwest has been renegotiated with a new supplier and have significantly increased due to enhanced processes and inflation

Water System – Adopted Sludge Budget



Appendix 5 - Capital Improvement Plan FY 2026 - 2030 Discussion Draft 2 –
Presented at GLWA Board Capital Planning Committee Meeting December 10, 2024

Freud Pump Station Improvements
Photo Submitted by Paul Ransom of Wastewater Operating Services



CIP Delivery Team

CAPITAL IMPROVEMENT PLAN FY 2026 - 2030 DISCUSSION DRAFT 2

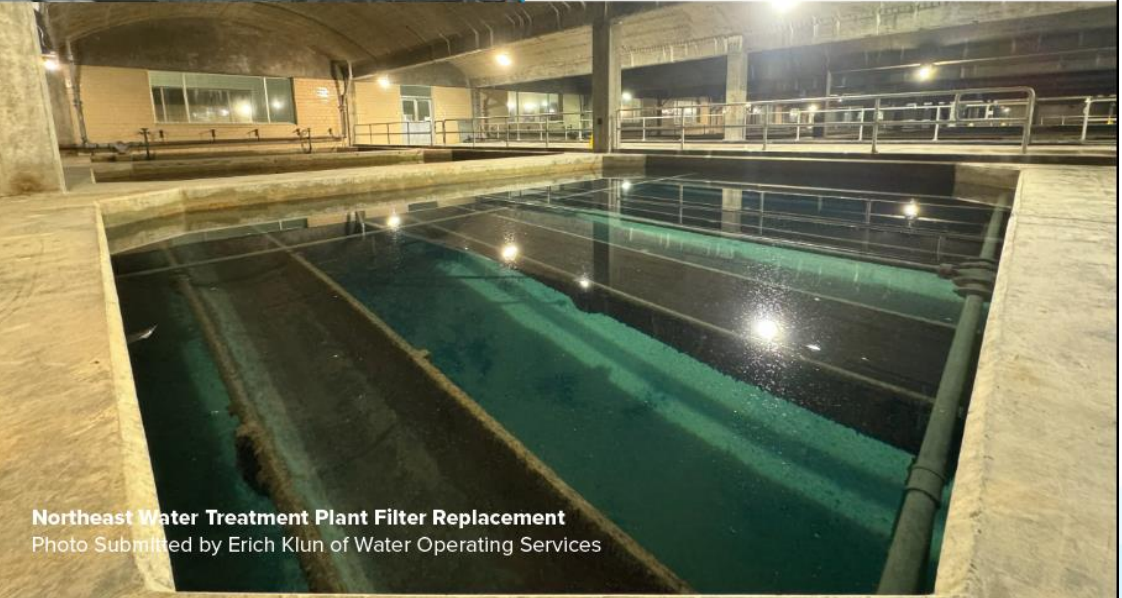


CAPITAL IMPROVEMENT PLAN 2026-2030

Updated December 3, 2024
Discussion- Draft 2



Capital Planning Committee Meeting December 10, 2024



Northeast Water Treatment Plant Filter Replacement
Photo Submitted by Erich Klun of Water Operating Services

Dima El-Gamal, PhD, PE, LEED @ AP.
Capital Improvement Planning Director

Jody Caldwell, PE
Chief Planning Officer

AGENDA

AGENDA



- ◆ CIP DISCUSSION DRAFT 1 FEEDBACK
- ◆ MAJOR CIP CHANGES SINCE DISCUSSION DRAFT 1
- ◆ CIP PUBLIC DASHBOARD
- ◆ RECAP AND NEXT STEPS

KEY TAKEAWAYS

💧 Discussion Draft # 1

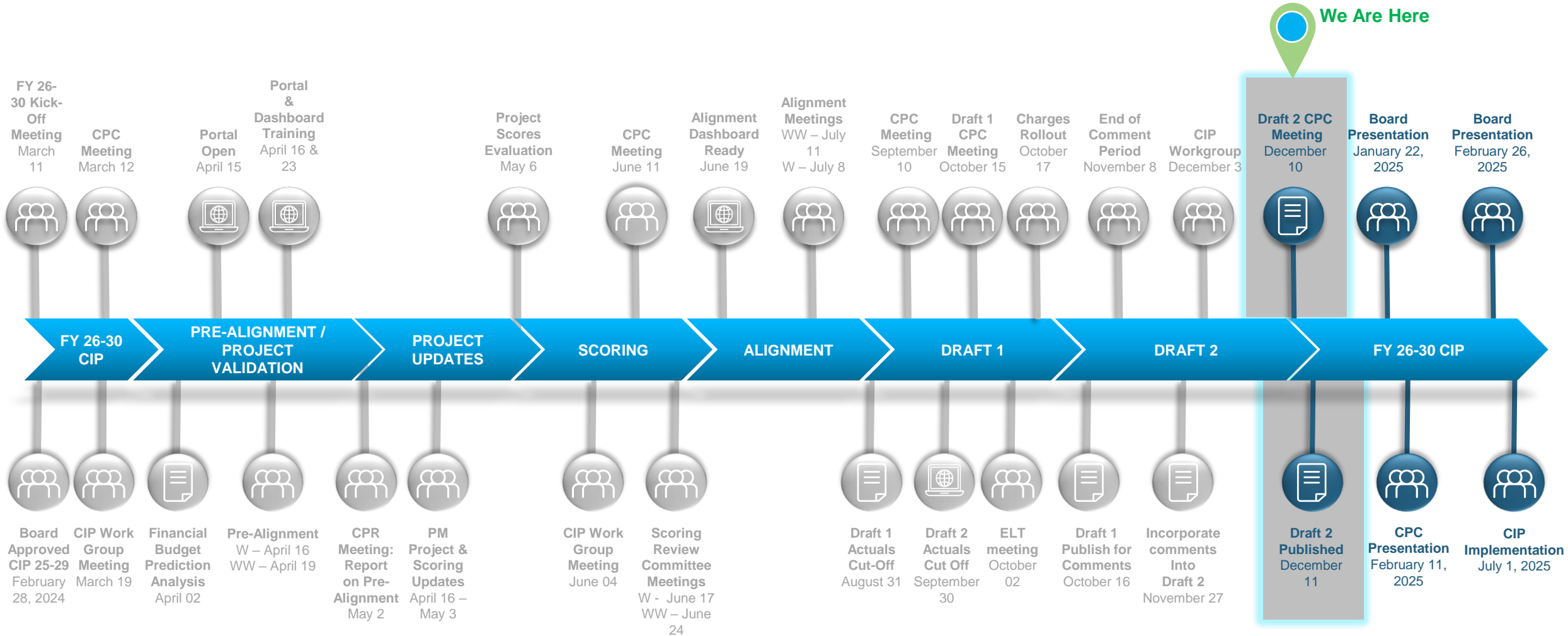
- 💧 Presented to Capital Planning Committee (CPC) on October 15, 2024
- 💧 Public comment period on Draft 1 from Oct 16 - Nov 8, 2024 – No comments received.

💧 Discussion Draft #2

- 💧 Published December 11, 2024
- 💧 Reflects FY 2024 actuals as of September 30, 2024, and project manager updates as of November 15, 2024
- 💧 Wastewater and Water Systems:
 - 💧 Reflects forecast of the System's overall needs (aligned with GLWA's 10-year financial plan)
 - 💧 A Capital Spend Ratio (CSR) is proposed to mitigate the impacts of potential project complexities and resource limitations (Vendors and GLWA)

💧 Ready to move to the next approval stage

FY 26-30 ROADMAP- HOW WE GOT HERE



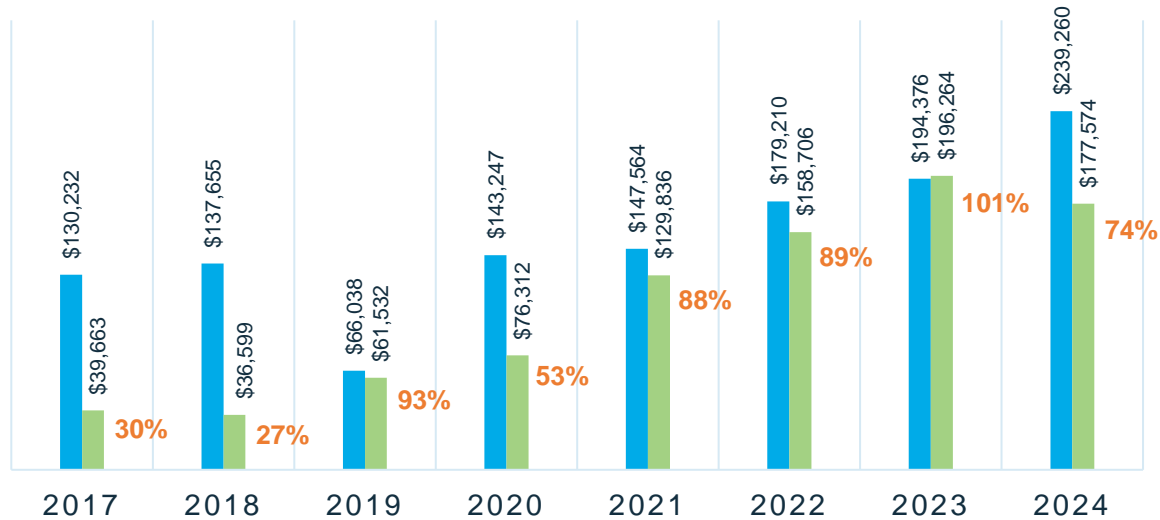
CPC – Capital Improvement Planning | CIP – Capital Improvement Plan
 CPR – Capital Program Review | ELT – Executive Leadership Team | PM – Project Manager

CIP DELIVERY: PAST PERFORMANCE HIGHLIGHTS



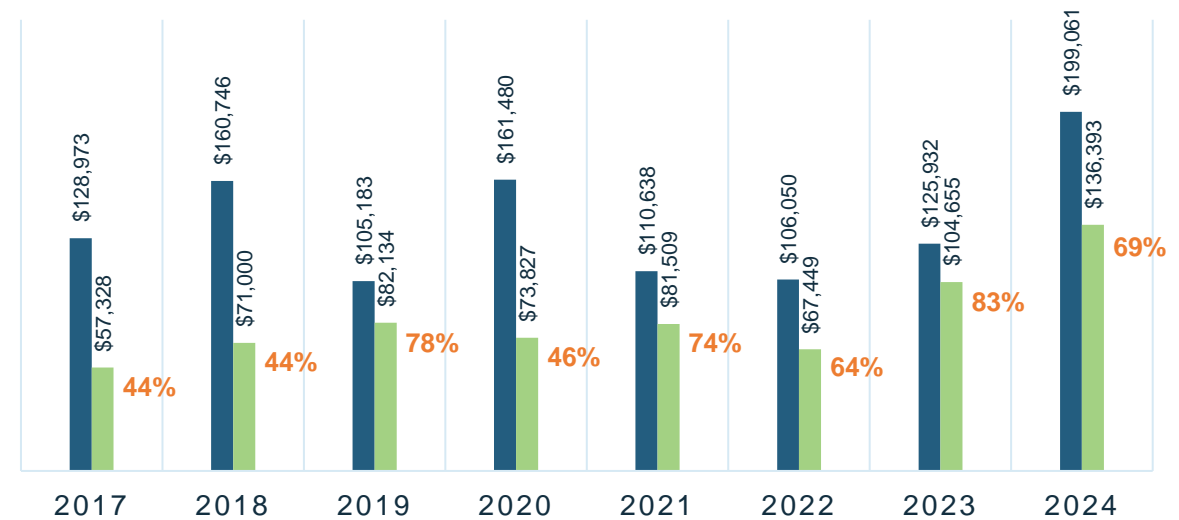
WATER

■ Approved Plan ■ Actual Spend



WASTEWATER

■ Approved Plan ■ Actual Spend



(Figures are shown in \$1,000's)



FY 2026 - 2030 DISCUSSION DRAFT #2 FEEDBACK ON DISCUSSION DRAFT #1



CIP Delivery Team

FEEDBACK SUMMARY ON DISCUSSION DRAFT #1

- 💧 Document: FY 2026 - 2030 CIP Discussion Draft #1
- 💧 FY 2026 - 2030 CIP Discussion Draft #1 Released October 16, 2024
- 💧 Public Comments Due November 8, 2024
- 💧 Meetings with Directors on November 4th and 18th
- 💧 Overall positive feedback FY 26-30 CIP Discussion Draft 1
- 💧 No comments received during the comment period



FY 2026 - 2030 DISCUSSION DRAFT #2 CHANGES SINCE DISCUSSION DRAFT #1



FY 2026 - 2030 CIP DISCUSSION DRAFT 2 MODIFICATIONS



💧 New in Draft #2

💧 Realtime updates:

- 💧 Incorporated actuals as of September 30, 2024
- 💧 Project cost and schedule updates as of November 15, 2024

💧 New emergency project:

- 💧 CIP# 260624 * - CSO Baby Creek Chemical Storage Tanks Replacement

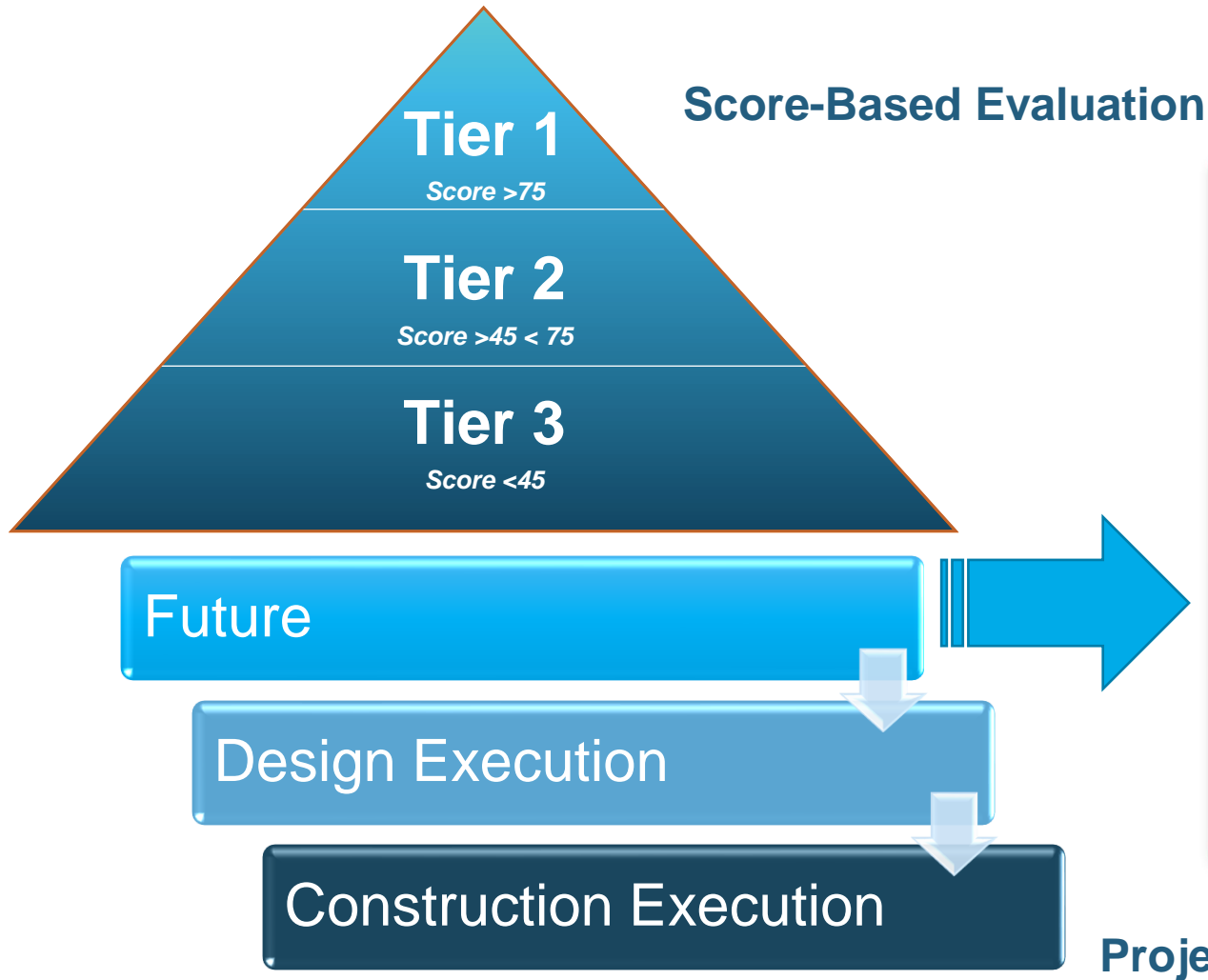
💧 New document cover

💧 Acknowledgment pages

💧 Miscellaneous quality review updates

* *To be scored by the scoring Committee next year*

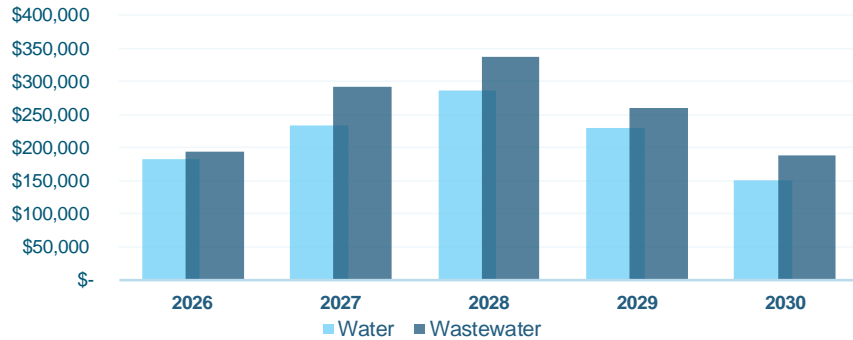
FY 2026 - 2030 CIP PRIORITIZATION



- Holistic Decision Factors
 - Predecessor Projects
 - Delivery Flexibility
 - Funding Source
 - Financial Plan
 - Proactive Planning
 - Constructability
 - Operational Considerations
 - Efficient Resource Allocation
 - Integrated Asset Management

FY 2026 - 2030 DISCUSSION DRAFT 2 - CIP AT A GLANCE

5-Year Outlook

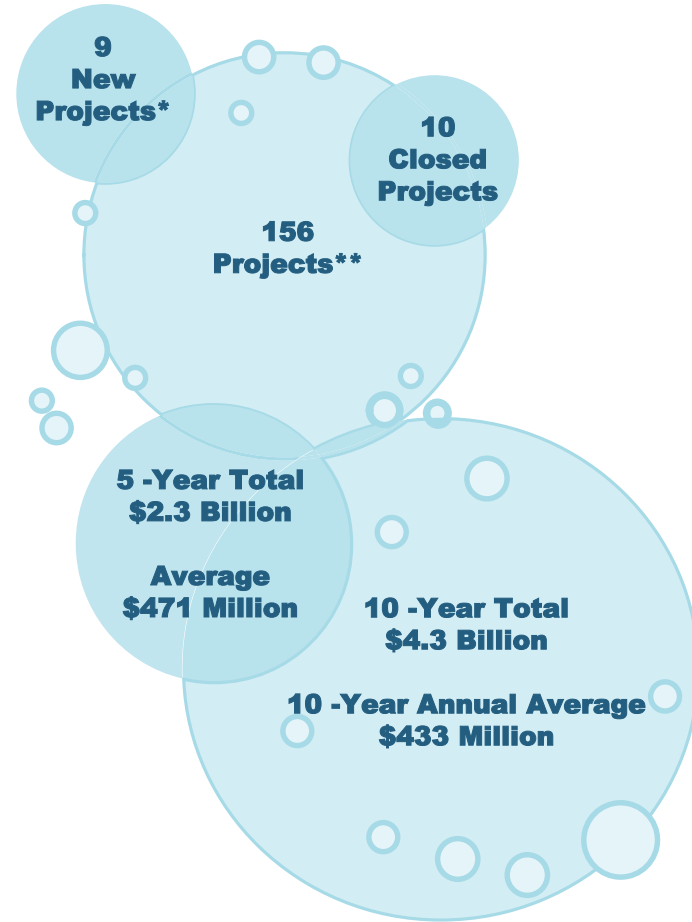


Financial figures in \$1,000s and rounded

Updated from Draft 1*

WATER	
5-Year Total	\$1,083,229
5-Year Average	\$216,646
10-Year Total	\$2,216,920
10-Year Average	\$221,692

WASTEWATER	
5-Year Total	\$1,271,603
5-Year Average	\$254,321
10-Year Total	\$2,112,834
10-Year Average	\$211,283



*5 NEW PROJECTS FROM PROGRAMS

* Based on Oct 31, 2024, actuals and PM cost and schedule updates as of Nov 15, 2024

WATER FY 2026 - 2030 CIP SUMMARY



CIP Document	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	5-Year Total
Draft #2 Water CIP FY 26-30	\$179,407	\$183,064	\$233,120	\$285,942	\$230,461	\$150,642	\$1,083,229
Draft #1 Water CIP FY 26-30		\$181,116	\$236,223	\$267,226	\$212,522	\$161,956	\$1,059,043
Difference (\$)		\$1,948	-\$3,103	\$18,715	\$17,939	-\$11,314	\$24,186
Difference (%)		1.08%	-1.31%	7.00%	8.44%	-6.99%	2.28%

	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	5-Year Avg
Proposed CSR %	100%	100%	100%	100%	95%	95%	98%

Financial Plan	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	5-Year Total
Approved Water CIP FY 2025-2029	\$207,333	\$209,752	\$227,823	\$236,331	\$190,550	\$202,288	\$1,071,789
Water CIP FY 2026-2030 with CSR	\$179,407	\$183,064	\$233,120	\$285,942	\$218,938	\$143,110	\$1,064,174
Difference with CSR	(\$27,926)	(\$26,688)	\$5,297	\$49,611	\$28,388	(\$59,178)	(\$7,615)
Difference with CSR %	-13.47%	-12.72%	2.33%	20.99%	14.90%	-29.25%	-0.71%

(Figures are shown in \$1,000's)



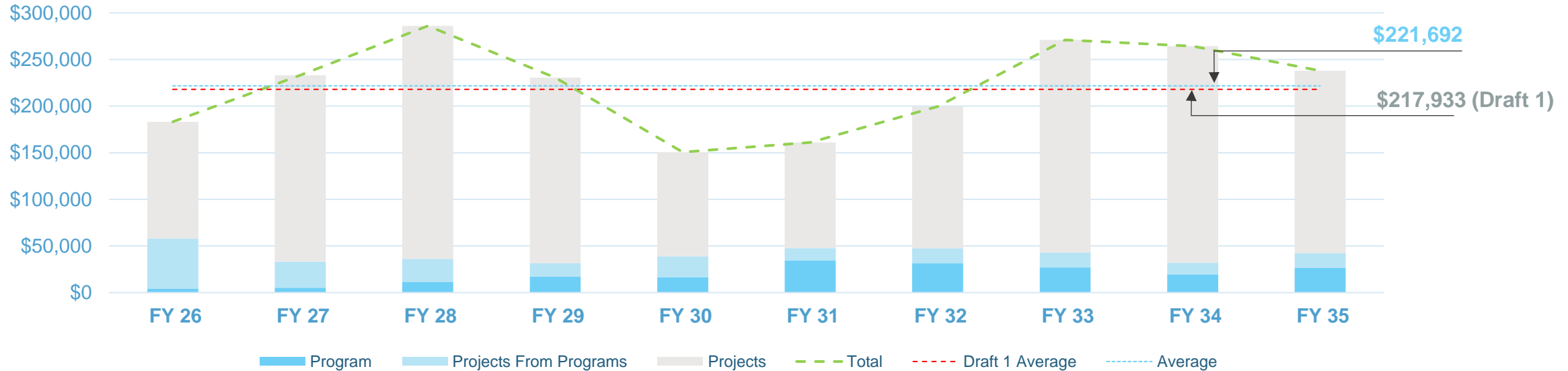
CIP – Capital Improvement Plan | FY – Fiscal Year | CSR – Capital Spend Ratio

WATER FY 2026 - 2035 10-YEAR CIP OUTLOOK



	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33	FY 34	FY 35
Program	\$2,046	\$4,346	\$5,308	\$11,263	\$17,346	\$16,677	\$34,602	\$31,314	\$26,883	\$19,608	\$26,562
Projects	\$140,297	\$125,226	\$199,880	\$249,803	\$198,824	\$111,962	\$113,280	\$152,166	\$228,158	\$232,163	\$195,855
Projects From Programs	\$37,064	\$53,492	\$27,932	\$24,876	\$14,290	\$22,003	\$13,075	\$16,090	\$15,916	\$12,425	\$15,594
Total	\$179,407	\$183,064	\$233,120	\$285,942	\$230,461	\$150,642	\$160,957	\$199,570	\$270,957	\$264,197	\$238,011

10-Year Water CIP Outlook



1.7% increase in 10-year average from Draft 1 FY 26-30 CIP (\$ 217,933)

Financial figures in \$1,000s and rounded



CIP – Capital Improvement Plan | FY – Fiscal Year

WASTEWATER FY 2026 - 2030 CIP SUMMARY



CIP Document	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	5-Year Total
Draft #2 Wastewater CIP FY 26-30	\$163,276	\$193,221	\$291,841	\$337,800	\$261,115	\$187,625	\$1,271,603
Draft #1 Wastewater CIP FY 26-30		\$200,329	\$286,379	\$313,596	\$256,043	\$189,542	\$1,245,889
Difference (\$)		-\$7,107	\$5,462	\$24,203	\$5,073	-\$1,917	\$25,714
Difference (%)		-3.55%	1.91%	7.72%	1.98%	-1.01%	2.06%

	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	5-Year Avg
Proposed CSR %	100%	90%	80%	84%	96%	100%	90%

Financial Plan	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	5-Year Total
Approved Wastewater CIP FY 2025-2029	\$169,189	\$212,693	\$216,231	\$201,995	\$182,417	\$180,433	\$982,525
Wastewater CIP FY 2026-2030 with CSR	\$163,276	\$173,899	\$233,473	\$283,752	\$250,671	\$187,625	\$1,129,420
Difference with CSR	(\$5,913)	(\$38,794)	\$17,242	\$81,757	\$68,254	\$7,192	\$146,895
Difference with CSR %	-3.49%	-18.24%	7.97%	40.47%	37.42%	3.99%	14.95%

(Figures are shown in \$1,000's)

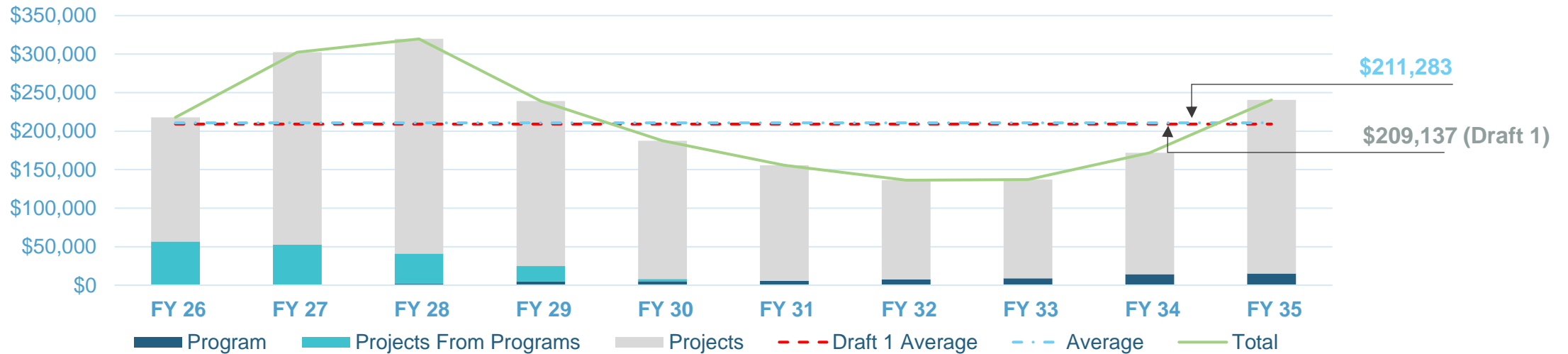
WASTEWATER FY 2026 - 2035 10-YEAR CIP OUTLOOK



	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33	FY 34	FY 35
Program	\$51	\$68	\$183	\$2,236	\$4,707	\$5,078	\$5,578	\$7,295	\$8,917	\$14,194	\$14,994
Projects	\$91,854	\$139,665	\$244,525	\$287,679	\$236,379	\$179,478	\$149,933	\$128,988	\$128,060	\$157,730	\$225,542
Projects From Programs	\$71,364	\$53,488	\$47,134	\$47,885	\$20,030	\$3,069	\$0	\$0	\$0	\$0	\$0
Total	\$163,269	\$193,221	\$291,841	\$337,800	\$261,115	\$187,625	\$155,511	\$136,283	\$136,978	\$171,924	\$240,536

Financial figures in \$1,000s and rounded

10-Year Wastewater CIP Outlook



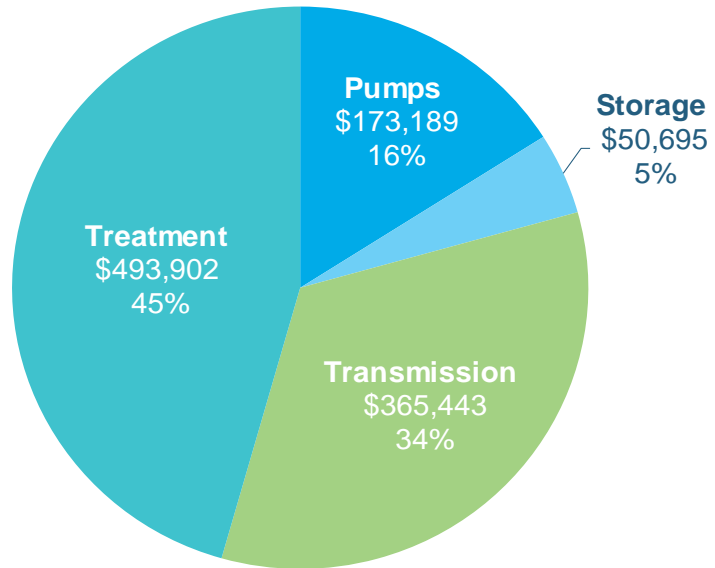
1% increase in 10-year average from Draft 1 FY 26-30 CIP (\$209,137)



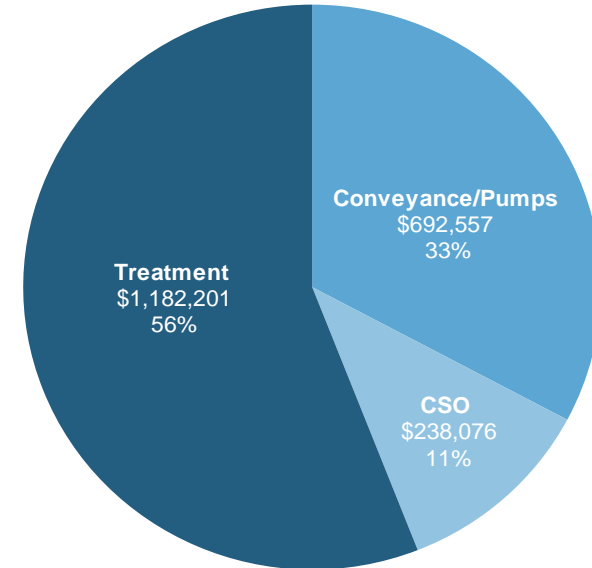
CIP – Capital Improvement Plan | FY – Fiscal Year

FY 2026 - 2030 CIP STATISTICS – BY FUNCTION

WATER PROJECTS 5-YEAR



WASTEWATER PROJECTS 5-YEAR

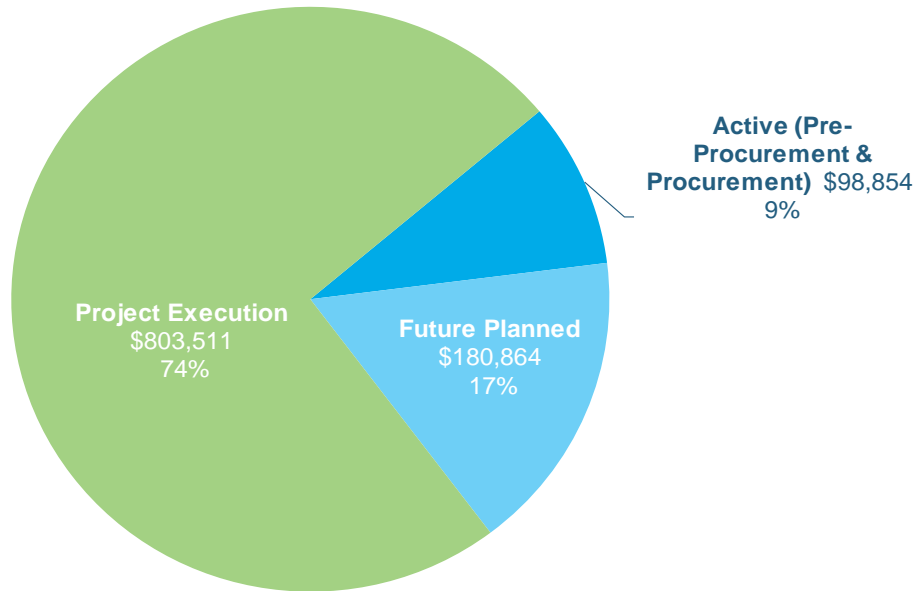


Financial figures in \$1,000s and rounded

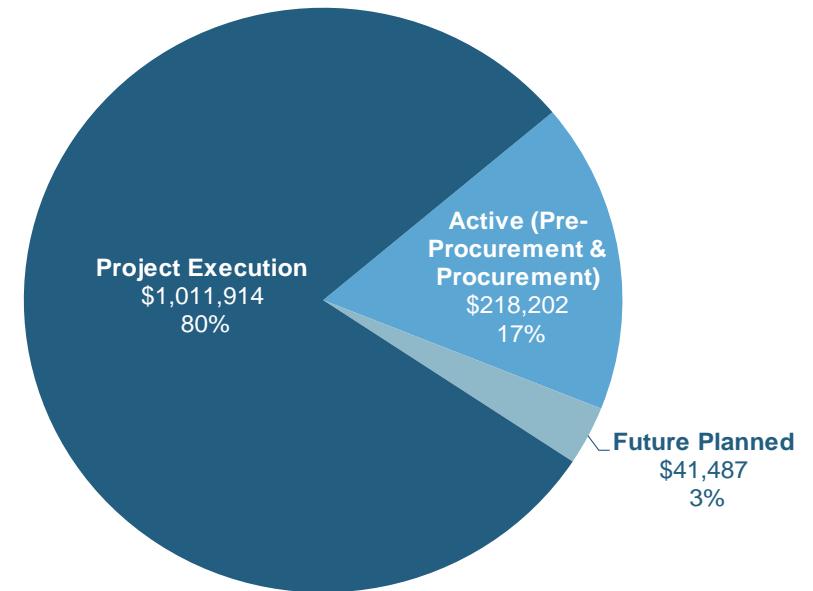
FY 2026 - 2030 CIP STATISTICS – BY PROJECT STATUS



WATER PROJECTS 5-YEAR



WASTEWATER PROJECTS 5-YEAR



Financial figures in \$1,000s and rounded

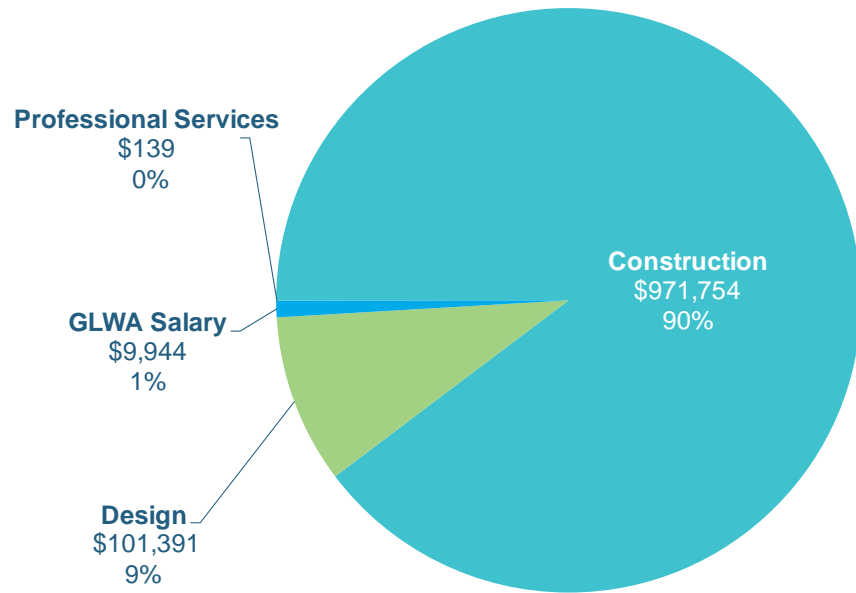


CIP – Capital Improvement Plan | FY – Fiscal Year

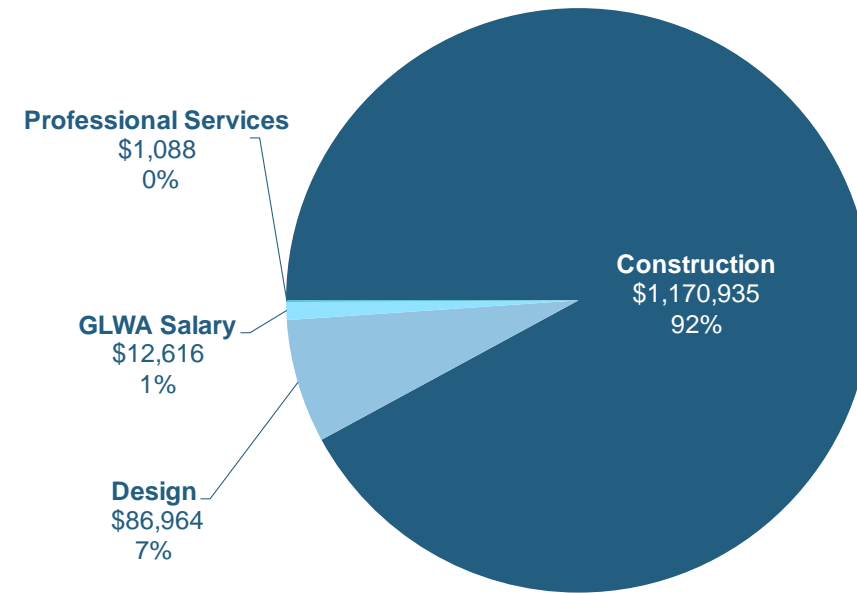
FY 2026 - 2030 CIP STATISTICS – BY SPEND CATEGORY



WATER 5-YEAR



WASTEWATER 5-YEAR



Financial figures in \$1,000s and rounded



CIP – Capital Improvement Plan | FY – Fiscal Year

CIP PUBLIC DASHBOARD



CIP Delivery Team



WHAT'S NEW - CIP PUBLIC DASHBOARD



- First CIP public facing dashboard
- Reflects current CIP document
- Applies filters to derive at data

GLWA Great Lakes Water Authority

Careers Financials Assistance Contact Login

ABOUT OUR SYSTEM MEMBERS VENDORS INVESTOR RELATIO

CAPITAL IMPROVEMENT VIEWER

CAPITAL IMPROVEMENT VIEWER

CIP PUBLIC DASHBOARD

CLICK HERE

CAPITAL IMPROVEMENT PLAN - DISCUSSION DRAFT #1 2026-2030

Download the Discussion Draft #1 Capital Improvement Plan (CIP) 2026 - 2030 for a look at GLWA's plans for maintaining and improving the regional system.

- CIP Report FY26-30 - Discussion Draft 1
- CIP FY26-30 - Appendix A
- CIP FY26-30 - Appendix B
- CIP FY26-30 - Appendix C

GLWA Great Lakes Water Authority

Total Cost: \$0 to \$908,270

Project Start Fiscal Year: 2025 to 2032

Reset Filters

Project Status: All

Activity Category: All

CIP Budget: All

Project Location: All

Key Areas: All

Facility: All

Links to Appendix A/B : Business Case Evaluation (BCE)

Link	CIP #	CIP Title
111001	111001	Lake Huron WTP, Low-Lift, High Lift and Filter Backwash Pumping System Ir
111010	111010	Lake Huron WTP Filtration Improvement
111012	111012	LHWTP-Flocculation Improvements
111013	111013	Lake Huron Water Treatment Plant Fireloop and Plant Water Improvements
112003	112003	Northeast Water Treatment Plant High-Lift Pumping Station Improvements
112007	112007	NEWTP-Structural Repairs
112008	112008	Northeast Water Treatment Plant Filter Replacement
113003	113003	Southwest Water Treatment Plant Low- and High lift Pumping station Impro
113010	113010	Southwest Water Treatment Plant Flocculation Improvements

CIP Budget

CIP: CIP Name	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31
111001 - Lake Huron WTP, Low-Lift, High Lift and Filter Backwash Pumping System Improvements	\$0	\$11,741	\$16,224	\$25,559	\$29,612	\$26,694	\$18,995
111010 - Lake Huron WTP Filtration Improvement	\$0	\$0	\$0	\$1,196	\$1,196	\$1,164	\$11,413
111012 - LHWTP-Flocculation Improvements	\$0	\$3,207	\$8,647	\$11,608	\$10,486	\$7,066	\$0
111013 - Lake Huron Water Treatment Plant Fireloop and Plant Water Improvements	\$0	\$0	\$0	\$0	\$0	\$0	\$707

CIP Schedule & Gantt Chart

Group Expand

Task	Start	End
111001 - LAKE HURON WTP, LOW-LIFT, HIGH LIFT A...	07/15/25	08/01/31
111010 - LAKE HURON WTP FILTRATION IMPROVE...	07/02/27	07/06/34
111012 - LHWTP-FLOCCULATION IMPROVEMENTS	01/01/26	06/30/30
111013 - LAKE HURON WATER TREATMENT PLANT...	07/01/30	06/30/34
112003 - NORTHEAST WATER TREATMENT PLANT ...	07/01/30	06/30/39

CIP - GLWA

Microsoft Power BI (powerbigov.us)



CIP – Capital Improvement Plan

RECAP & NEXT STEPS



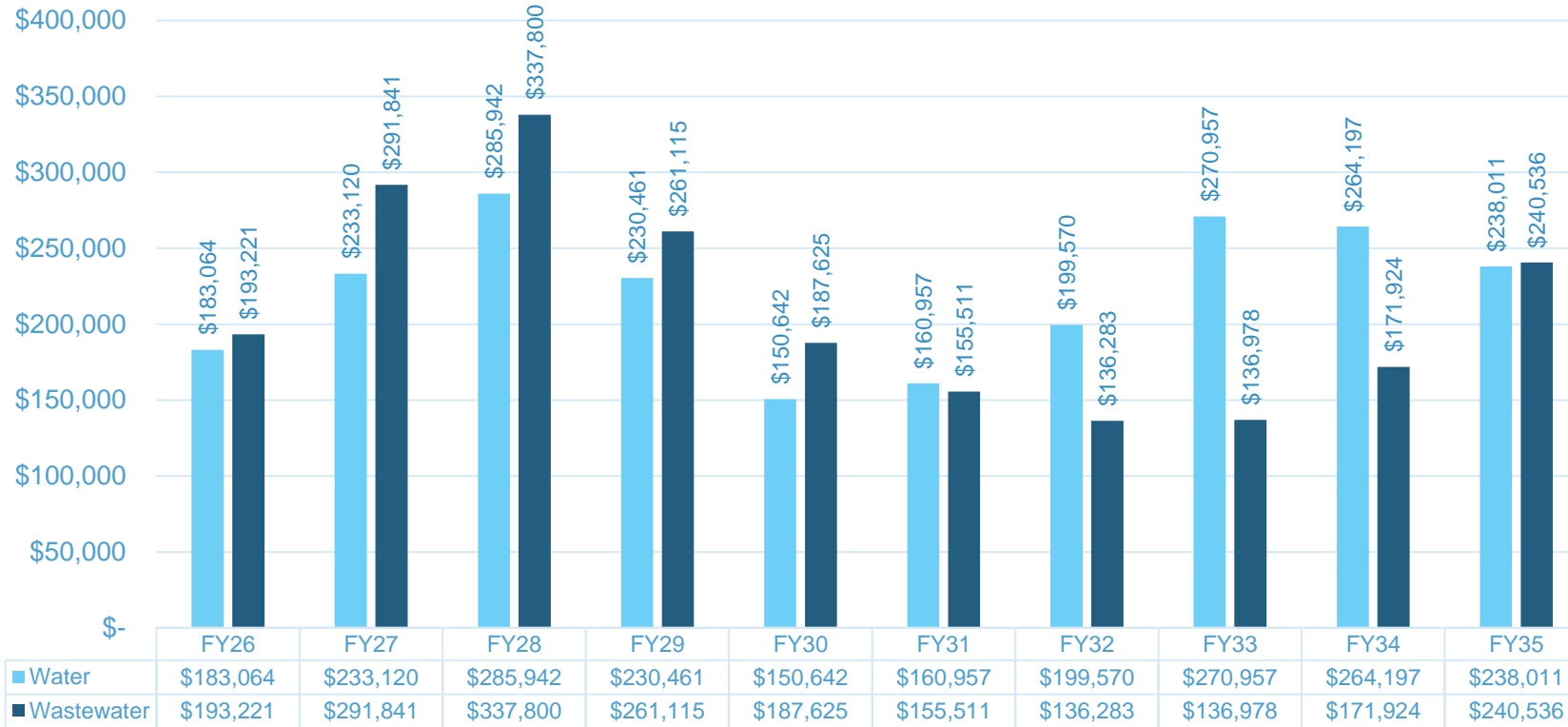
CIP Delivery Team



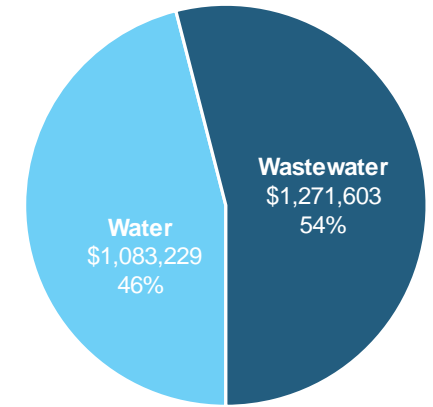
WATER & WASTEWATER CIP FY 2026 - 2035

(10 YEAR PROJECTIONS)

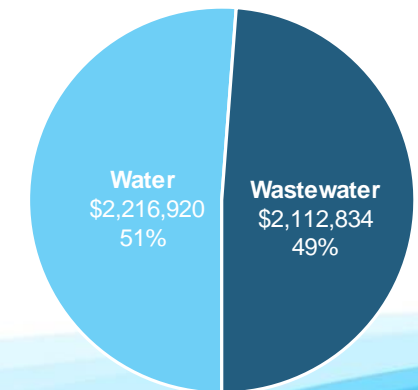
10 Year CIP



CIP FY 26-30 (5 Year) Business Unit



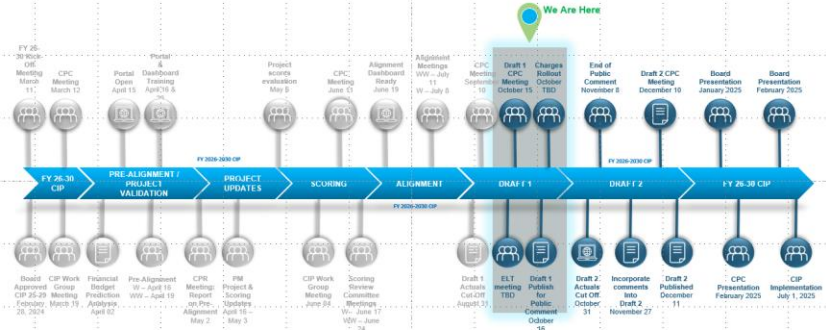
CIP FY 26-35 (10 Year) Business Unit



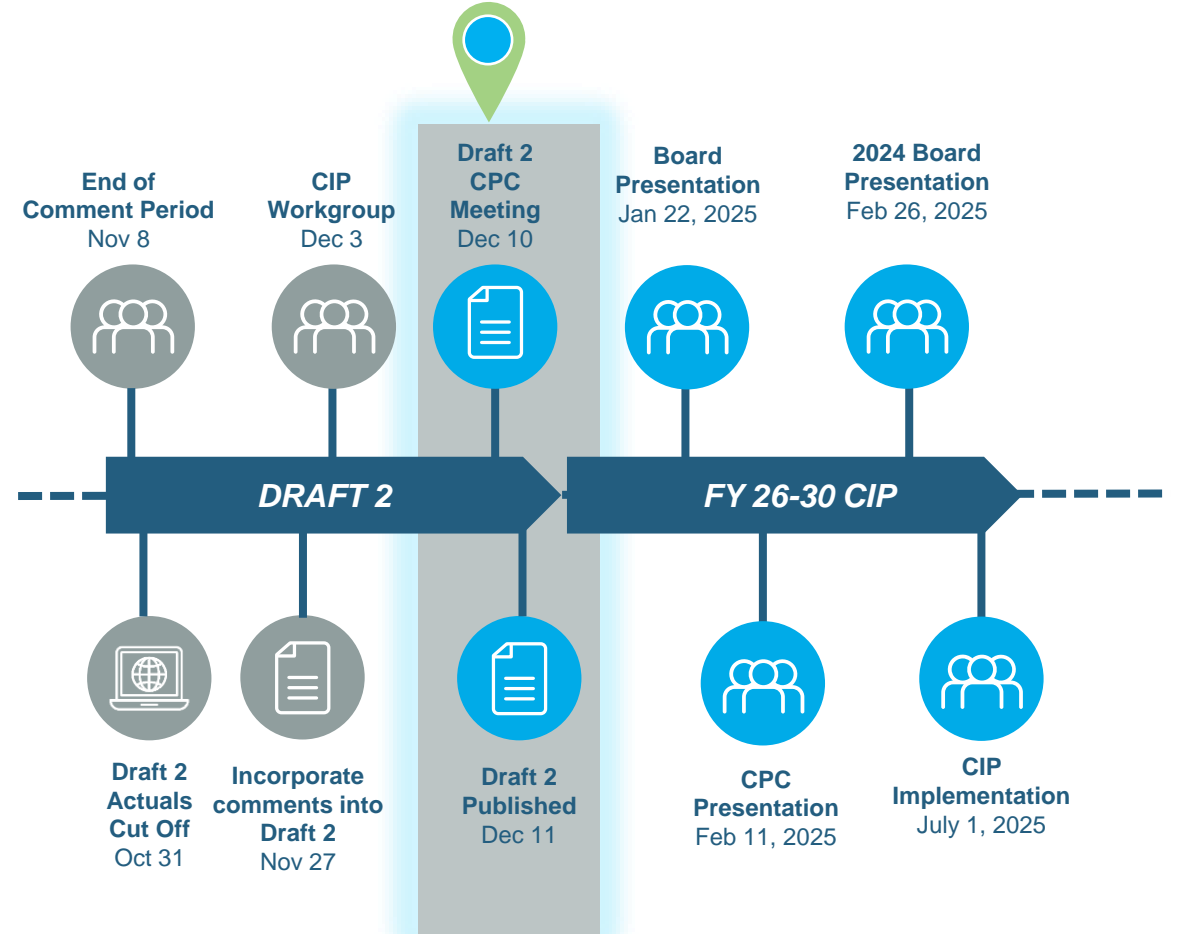
Financial figures in \$1,000s

FY 26-30 ROADMAP- WHAT'S NEXT

FY 26-30 ROADMAP- HOW WE GOT HERE



We Are Here



KEY TAKEAWAYS

💧 Discussion Draft # 1

- 💧 Presented to Capital Planning Committee (CPC) on October 15, 2024
- 💧 Comment period on Draft 1 from Oct 16 - Nov 8, 2024 – No comments received.

💧 Discussion Draft #2

- 💧 Published December 11, 2024 ([CIP - GLWA \(glwater.org\)](https://glwater.org))
- 💧 Reflects FY 2024 actuals as of September 30, 2024, and project manager updates as of November 15, 2024
- 💧 Wastewater and Water Systems:
 - 💧 Reflects forecast of the System's overall needs (aligned with GLWA's 10-year financial plan)
 - 💧 A Capital Spend Ratio (CSR) is proposed to mitigate the impacts of potential project complexities and resource limitations (Vendors and GLWA)

💧 Ready to move to the next approval stage

QUESTIONS & THANK YOU



CIP Delivery Team

